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Maltreatment experiences and associated factors prior to admission to residential care: A sample of institutionalized children and youth in western Kenya

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Background

In sub-Saharan Africa alone, there are now more than 56 million orphaned children, defined as children less than 18 years who have lost one or both parents (United Nations Children's Fund [UNICEF], 2010). In Kenya, among an estimated 2.5 million orphans, nearly half are as a result of HIV/AIDS (UNICEF, United Nations Program on HIV/AIDS [UNAIDS] & President's Emergency Plan for AIDS Relief [PEPFAR], 2006). Throughout sub-Saharan Africa, orphans, and especially children orphaned due to AIDS, appear to be particularly vulnerable compared to their non-orphaned peers: they are less likely to attend school (Case, Paxson, Ableidinger, Monasch, & Boerma, 2004; Monasch & Boerma, 2004; Nyambedha, Wandibba, Aagaard-Hansen, 2003; UNICEF et al., 2006), have worse physical and mental health outcomes (Atwine, Cantor-Graae, & Banjunirwe, 2005; Miller, Gruskin, Subramanian, & Heymann, 2007; UNICEF et al., 2006) and are at increased risk of HIV (Operario, Underhill, Chuong, & Cluver, 2011).

Orphans are most often cared for by extended families (Foster & Germann, 2002; Miller et al., 2007; Monasch & Boerma, 2004; UNICEF et al, 2006). In Kenya, 51% of orphans, who are not being raised by a surviving parent, live with grandparents (UNICEF et al., 2006). Households caring for orphans have been shown to be more impoverished (Heymann, Earle, Rajaraman, Miller, & Bogen, 2007; Miller et al., 2007; Oleke, Blystad, & Rekdal, 2005) and

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have less favorable dependency ratios (Heymann et al., 2007; Monasch & Boerma, 2004). Providing for additional children often puts financial strain on caregivers who may be unable to meet the material needs of orphans in their care (Heymann et al., 2007; Nyambedha, et al 2003). In addition, orphans are often subject to stigma and discrimination because of their perceived association with HIV/AIDS and/or death (Case et al., 2004; Cluver & Gardner, 2007). Hence, concerns have been raised regarding the care these children receive from extended families. Several studies have shown that orphans experience high rates of exploitation, neglect and abuse (Baarøy & Webb, 2008; Birdthistle et al., 2010; Cluver, Orkin, Boyes, Gardner, & Meinck, 2011; Onuoha, Munakata, Serumaga-Zake, Nyonyintono, & Bogere, 2009; Operario et al., 2011). Similar concerns have been raised regarding separated children, defined as children whose parents are absent from their lives (Schenk & Williamson, 2005).

Several models of care and support for orphaned children have emerged in response to this social crisis. Many are home-based and provide support for extended families caring for orphans (Foster & Germann, 2002; Kidman, Petrow, & Heymann, 2007; Miller et al., 2007). Nyambedha et al (2003) found that extended families living in rural western Kenya were overburdened: one out of three children was bereft of at least one parent (single orphans), and one out of nine was bereft of both (double orphans), resulting in some orphans being institutionalized (Nyambedha et al., 2003). Institutions shelter some of the neediest children, those without an adult caregiver or those who are survivors of abuse, neglect and abandonment (Nyambedha et al., 2003; Mbugua, 2004; Meintjes, Moses, Berry, & Mampane, 2007; Powell, Chinake, Mudzinge, Maambira, & Mukutiri, 2004; Reeler, Saba, & Bhatt, 2002; Varnis, 2001). Orphaned and separated children who come to live in institutions may have been subjected to child maltreatment by family members prior to admission (Morantz & Heymann, 2010; Nyambedha, et al 2003; Powell et al, 2004).

In the Uasin Gishu County in western Kenya, a minority of orphans and other children and youth, individuals aged less than 25, are being cared for in Charitable Children's Institutions (CCIs), residential facilities housing more than 20 children (Government of Kenya, 2001). Little is known about the characteristics of the residents of CCIs, or the conditions that contributed to their admission. A better understanding of children and youth's pre-residential experiences with maltreatment and the care they received may help inform policy, prevention and intervention projects in the community, and treatment programs in CCIs.

Study Objectives

The primary objective of this study was to determine the prevalence of abuse and neglect experienced by institutionalized children and youth prior to their admission to CCIs in the Uasin Gishu County of western Kenya. The secondary objectives were to describe the socio-demographic characteristics of resident children and youth, their reasons for admission, and the factors associated with prior experiences of maltreatment

Methods

Study design

This was a retrospective, observational review of existing data extracted from the records of CCIs, analysed cross-sectionally.

Study location

The Uasin Gishu County is located in western Kenya. It has a population of over 890,000 people, half of whom are less than 20 years old (Kenyan Open Data Project, 2011). In 2009,

HIV prevalence in Kenya was estimated at 6.3%% (Joint United Nations Programme on HIV/AIDS, n.d.)), resulting in many children losing one or both parents.

Study population

A purposeful sample of five CCIs was selected from among the 20 institutions included in the ongoing Orphaned and Separated Children's Assessments Related (OSCAR) to their Health and Well-Being (R01HD060478). The OSCAR project is a longitudinal cohort study examining the health outcomes of orphans and other vulnerable children living in different care environments in Uasin Gishu County. The CCIs included in the review were chosen because of their similarities as large general orphanages (i.e. ≥50 children versus <50, not specialized ones e.g. for HIV-infected children, detention or rescue centers, etc.) and the availability and quality of their records. All files of residents in the CCIs were included in the review. Informed consent was obtained from the Directors of participating CCIs prior to data collection. All consultation of child residents' files occurred on-site in the institutions. Ethical approval was obtained from the Moi Teaching and Referral Hospital/Moi University Institutional Research and Ethics Committee, the University of Toronto Research Ethics Board, and the Indiana University Institutional Review Board.

Data collection

Data collection involved accessing and extracting anonymous data from the institutional files of all CCI residents mandated for placement there. The data were manually collected by the first author, a pediatrician with experience in child maltreatment pediatrics, between June and August 2011, and entered into a standardized data extraction tool (available upon request).

Variables

The following variables were collected in the standardized data extraction tool: sex, birthdate or age, date of admission, orphan status, reason for placement, previous primary caregiver, separation from siblings, single-parent status, material deprivation, and forms of prior maltreatment, if any. Table 1 provides definitions of the variables collected and their possible values. For analyses, maternal and paternal orphans were combined into the category "single orphan" (lost one parent). The reasons for placement were not made explicit in some of the files; however, descriptions of previous care settings were available in most files, allowing the reason for placement to be deduced (inferred) in most cases. When no reason for placement was explicitly stated but a child or youth had been abandoned, severely neglected, or physically or sexually abused, this form of maltreatment was recorded as the reason for placement. In cases where children had been subjected to both abuse and neglect, abuse was considered to be the reason for placement. In cases where children had been subjected to both abandonment and neglect, abandonment was considered to be the reason for placement. [Table 1]

The scope and categories of maltreatment considered in this study were based on the definition and concepts contained in a World Health Organization [WHO] and International Society for the Prevention of Child Abuse and Neglect [ISPCAN] joint report (2006): "all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power." In this study, physical abuse refers to the use of physical force with a high likelihood of inflicted harm. Sexual abuse refers to involving a child in sexual activity that she/he is unable to consent to or does not understand, or that violates the laws of society. Psychological abuse refers to instances of threats, emotional rejection, or witnessing of domestic violence. General neglect refers to experiences of inappropriate

caregiving, such as being left alone at home at a young age or deprived of basic necessities not due to destitution. Medical neglect refers to being severely ill or malnourished without medical care being sought. School neglect refers to children and youth who had never been to or were withdrawn from school, and who were placed after the age of seven, the age by which children are expected to start primary school in Kenya. Abandonment refers to being deserted in a public place or private home by at least one caregiver prior to their placement. Child labor, among children and youth over the age of six at time of placement, was defined as being made to engage in excessive domestic or paid work.

Although these terms were not consistently used nor were the types of maltreatment always explicitly stated in the CCI files, descriptive information on experiences of maltreatment was provided, allowing the file reviewer (__) to classify the maltreatment experiences of residents according to this categorization.

Data analysis

All analyses were conducted using Microsoft Excel 2007 and STATA (version 10.0). In order to examine the relationships between sociodemographic variables hypothesized to be associated with reasons for placement and with experiences of maltreatment, bivariate analyses were conducted and unadjusted odds ratios calculated. The 95% confidence intervals (95% CI) were calculated and $p < 0.05$ was chosen as the level of significance. Multivariable logistic regression models analyzed factors hypothesized to be associated with the outcomes 1) being admitted for maltreatment rather than destitution or lack of a caregiver and 2) having experienced maltreatment, controlling for covariates determined by the Akaike Information Criterion and stepwise forward regression with an entry criteria of $p < 0.05$. The role of orphan status as a potential confounder was explored in bivariate analyses when there was discordance between bivariate and multivariable analyses. Sensitivity analyses were also carried out with unknowns included and excluded for bivariate analyses, and using different definitions of previous experiences of maltreatment.

Results

Characteristics of included CCIs

The number of child and youth residents in each CCI ranged from 50 to 143 (total=462). One of the CCIs was in an urban center and four were in rural areas. Basic demographic information was available on all residents. In the case of infants or young children found abandoned, there was often no historical information available.

Sociodemographics

Descriptive demographic data and data on previous care settings are shown in Table 2. Slightly more than half (56%) of children were male. The median age of residents at admission was 6.8 years with a range of 0-16.7 years. The median age at the time of file review was 12.4 years with a range of 0.25-40 years. All residents were less than 25 years of age, except for one resident who was 40 years old and who was still being cared for due to a severe visual impairment. The majority of children were orphans: 38% were single orphans and 28% were double orphans. Among single orphans, the majority (91%) were maternal orphans. One-fifth (20%) of children were non-orphans; they were separated from parents. Almost half of children (49%) were separated from at least one sibling.

More than a third (36%) of all children and youth residents lived with their grandmother, grandfather or both grandparents prior to their placement. Among orphans, nearly three-quarters (73%) lived with their grandmother, grandfather or grandparents before being admitted. Nineteen percent (19%) lived with a parent or both parents; these children were

either single orphans or separated from parents. More than half of residents (52%) came from single-parent families, primarily female-headed. documented in Instances of material deprivation in previous care settings were 60% of resident children and youth files. [Table 2]

Reasons for placement

Reasons for placement were recorded in court orders for placement or institutional admittance forms. In some files, the reasons that children and youth were mandated for placement in the CCIs were not explicitly stated, though in all but 20 cases (4%), a reason for placement could be discerned based on other documentation. The most common reason children and youth were placed in the CCIs was destitution (36%) followed by abandonment (22%), neglect (21%), physical or sexual abuse (8%), and lack of an available or able caregiver (8%). Approximately half (52%) of all children and youth were placed for reasons related to maltreatment.

Bivariate analyses of the odds ratios of being admitted for maltreatment (abuse, neglect or abandonment) rather than for destitution or lack of a caregiver are shown in Table 3. In multivariable analyses (also Table 3), children who had lived with guardians not their parents (adjusted odds ratio, AOR: 0.36, 95% CI: 0.15-0.86) and those who were orphans (AOR: 0.17, 95% CI: 0.06-0.44) were less likely to have been admitted for maltreatment. In bivariate analysis, being separated from siblings was not associated with being admitted for maltreatment; however, when controlling for orphan status and previous caregivers in the multivariable analysis, children who were separated from siblings were more likely to be admitted for maltreatment (AOR: 1.62, 95% CI: 1.01-2.60). Children who were separated from siblings were more likely to be orphaned (OR: 2.85; 95% CI: 1.56-5.28) than children not separated from siblings. In bivariate analysis, age at admission was associated with being admitted for maltreatment; however, when controlling for orphan status in the multivariable analysis, age at admission was no longer associated with being placed for maltreatment. Children who were older than six at the time of admission were more likely to be orphaned (OR: 6.22, 95% CI: 3.64-10.74) than children younger than six at the time of placement. When controlling for orphan status in the multivariable analysis, having a single-parent as guardian was no longer associated with being placed for maltreatment. Children with a single-parent guardian were less likely to have been orphaned (OR: 0.39; 95% CI: 0.21-0.70). [Table 3]

In both bivariate (unadjusted) and multivariable analyses, the factor most strongly associated with being admitted for maltreatment was the orphan status of resident children and youth. The most common reason for non-orphans to be admitted was maltreatment-related (90%), whereas the most common reason for orphans to be admitted was destitution (49%). Non-orphans were 15 times more likely to be admitted to CCIs for maltreatment-related concerns than orphans (95% CI: 7.03-34.45).

Experiences of maltreatment prior to CCI entry

Not all children who had experienced maltreatment were admitted to the CCI for reasons associated with this maltreatment. As such, the primary outcome of interest was whether they had experienced any maltreatment prior to admission. The majority of child and youth residents had experienced at least one form of maltreatment (66%) (see Table 4).

Physical abuse, experienced by 8% of children prior to admission, included instances of beating, strangling, stabbing and non-accidental burning. Sexual abuse, including rape, sexual touching, and anal penetration with an object, was documented in the files of 2% of children. Psychological abuse was experienced by 27% of children, and included being humiliated or threatened by caregivers, or exposed to domestic violence. General neglect

had been experienced by 26% of children at some point prior to placement. Eighteen percent (18%) were found to be medically neglected upon admission to the CCIs: some were severely malnourished and suffering from untreated infections. School neglect was experienced by 38% of residents prior to admission in the CCI. Nearly a third of children (30%) had experienced abandonment in a private home or public place, such as a street, field or hospital, by at least one caregiver prior to their placement. Child labor, experienced by 23%, included instances of having been made to engage in begging, wage labor, or excessive domestic chores, such as providing child care to younger children, working in fields or taking care of livestock.

Table 4 summarizes experiences of prior maltreatment for orphans and non-orphans. Compared to non-orphans, orphans were significantly less likely to have experienced any form of maltreatment (OR: 0.03, 95% CI: 0.00-0.11). They were also significantly less likely to have experienced physical abuse (OR: 0.43, 95% CI: 0.20-0.95), psychological abuse (OR: 0.54, 95% CI: 0.33-0.91), general neglect (OR: 0.41, 95% CI: 0.25-0.70), medical neglect (OR: 0.47, 95% CI: 0.26-0.86), school neglect (OR: 0.30, 95% CI: 0.10-0.86) and abandonment (OR: 0.05, 95% CI: 0.03-0.10). No significant differences were found in having experienced sexual abuse and child labor between orphans and non-orphans; however the numbers of children who experienced sexual abuse were very small. [Table 4]

Sociodemographic factors found to be associated with ever having experienced maltreatment are described in Table 5. Children and youth older than six years of age at admission (OR: 0.57, 95% CI: 0.38-0.87), children and youth who lived with guardians other than their parents (OR: 0.12, 95% CI: 0.05-0.28), and orphans (OR: 0.03, 95% CI: 0.00-0.11) were significantly less likely to have experienced maltreatment prior to being admitted into a CCI. Children who were older than six at the time of admission and children who lived with a non-parent caregiver were also more likely to be orphaned than children younger than six at the time of placement (OR: 6.22; 95% CI: 3.64-10.74) and children who lived with a parent caregiver (OR: 55.49, 95% CI: 26.50-117.54). When controlling for orphan status in the multivariable analysis, age at admission and having a parent as the previous primary caregiver were no longer associated with ever having experienced maltreatment. In multivariable analyses, children who were separated from at least one sibling were more likely to have experienced maltreatment (AOR: 1.76, 95% CI: 1.10-2.80). In multivariable analyses, female children (AOR 0.61, 95% CI: 0.39-0.95) and orphans (AOR: 0.04, 95% CI: 0.01-0.17) were less likely to have ever experienced maltreatment prior to admission. In sensitivity analyses, when unknowns were excluded in bivariate analyses, female children were also significantly less likely to have experienced maltreatment prior to placement. Sensitivity analyses were also conducted using different definitions of maltreatment, by excluding instances limited to child labor and/or school neglect, and results remained similar in direction and magnitude. [Table 5]

Discussion

We found a high prevalence of prior maltreatment among institutionalized children and youth in this file review: 67% of child and youth residents had experienced at least one form of maltreatment before their placement, and half were placed for reasons related to maltreatment. Data from other countries have found similar prevalences. Among 232 child and youth residents in a Botswana residential care facility, 28% were placed for neglect (versus 21% in this study) and 8% for abuse (same in this study) (Morantz & Heymann, 2010). An audit of 1007 children and youth living in 28 institutions in South Africa revealed that 30% had experienced abuse and/or neglect, and 24% had been abandoned (Meintjes et al 2007). In Zimbabwe, responses to an open-ended questionnaire by 212 children living in

ten residential care facilities revealed that the most common stressors reported were prior experiences of rejection and desertion by parents and relatives, and mistreatment by stepparents (Powell et al., 2004).

These previous studies reported similar prevalences of abuse and neglect; however, this study is unique in that it also aimed to identify factors associated with prior experiences of maltreatment. The factor most strongly associated with experiences of maltreatment or being placed for maltreatment was a child's orphan status. Non-orphaned (separated) child and youth residents of the CCIs in this study were far more likely than orphans to have been admitted for maltreatment-related reasons and to have experienced most findings forms of prior maltreatment. At first glance, these may seem surprising given the multiple reports of increased risk of maltreatment among orphans living in communities throughout sub-Saharan Africa: concerns have been raised about orphans being vulnerable to physical and sexual abuse, stigma, property-grabbing, and economic exploitation in extended families (Baarøy & Webb, 2008; Birdthistle et al., 2010; Cluver et al., 2011; Lachman et al., 2002; Oleke, Blystad, Moland, Rekdal & Heggenhougen, 2006, Onuoha et al., 2009; Operario et al., 2011; Strode & Barrett-Grant, 2001; UNICEF et al., 2004; UNICEF et al., 2006). Although the cross-sectional nature of the data collected does not allow a definite explanation for these findings, one possible explanation is that more extreme adverse conditions, such as maltreatment, would need to exist in order for a child to be removed from the care of a parent(s), rather than a non-parent guardian. Indeed, those children who had previously lived with their parent(s) were more likely to have been admitted for maltreatment or have had experiences of maltreatment than those children who had been living with non-parental guardians prior to placement. Orphans are also more likely than non-orphans to be admitted to a residential care facility because they have no one else to look after them; studies have shown that orphans in sub-Saharan Africa typically experience more frequent changes in caregivers than non-orphans and live in households with higher dependency ratios (Ansell & Young, 2004; Heymann et al., 2007; Monasch & Boerma, 2004).

In contrast to non-orphans, orphans in sub-Saharan Africa have been shown to live in households with lower incomes (Heymann & Kidman, 2009; Miller et al., 2007). In this study, destitution was the main reason for the admission of most orphaned children; nearly half of all orphans were admitted for destitution. Poverty-related conditions seem to underlie much of the orphanhood experience (Foster et al., 1997; Heymann et al., 2007; Miller et al., 2007; Nyambedha et al., 2003; Oleke et al., 2005; Powell et al., 2004; UNICEF et al., 2006). In the file review carried out at a residential care facility in Botswana, 38% of children and youth had been admitted for poverty-related conditions (Morantz & Heymann, 2010). Meinjtes et al (2007) in their study of institutions in South Africa maintained that "the underlying reason for admission is destitution." A high prevalence of destitution was also found in this study (60% of child and youth residents). A recent UNICEF report that considered worldwide data warns of increasing disparities in wealth among children living in urban areas and raises alarm at the future prospects of disadvantaged children (UNICEF, 2012).

Some challenges experienced in this study should be kept in mind. The use of a single file reviewer may have affected the reliability of the findings; however, a standardized data extraction tool was employed. Lacunae in the quality and completeness of the CCI files left some gaps in data. However, most files had complete demographic information, and most recorded discernable reasons for admission and characteristics of previous care settings. Nevertheless, instances of maltreatment were likely under-recorded because of non-disclosure by caregivers, informants, and survivors, or due to incomplete recording of this information. As such, the institutional prevalence data on the various forms of maltreatment

obtained are likely underestimates of the true extent of the problems. It should be noted that these prevalence findings should not be interpreted as the prevalence of child abuse and neglect in the community. Obviously the children in the institutions come from backgrounds in which they were at especially high risk and therefore a highly selective study population. In addition, the orphan status was unknown for 32% of the children and youth placed for abandonment; it is possible that some of the abandoned children with unknown orphan status were actually orphans. This misclassification of orphan status, may have led to random misclassification bias towards the null in some estimates.

This analysis is also limited by its observational, retrospective nature and our limitation to cross-sectional analysis. Although it was possible to examine the association between various sociodemographic factors and reasons for admission, and sociodemographic factors and experiences of maltreatment, temporal sequence could only be inferred. Lastly, because the five CCIs were chosen in part because of the quality and availability of their files, they may not be representative of other Uasin Gishu County CCIs or orphanages in other jurisdictions.

Despite these limitations, our findings have contributed much needed information to the dearth of literature on child maltreatment in sub-Saharan Africa and have important implications for future research directions and for policy and programming. Few studies have attempted to determine the prevalence of maltreatment among children and youth in Sub-Saharan Africa, but several have suggested that abuse and neglect are unacceptably prevalent in communities (Akmatov, 2011; Berry & Guthrie, 2003; Reza et al., 2009; Stoltenborgh, van Ijzendoorn, Euser, & Bakermans-Kranenburg, 2011). Prospective studies are needed to determine risk and protective factors for maltreatment among non-orphaned and orphaned children living in communities and in institutions. In particular, governments should consider developing standardized data collection tools for child and youth residents of institutions in order to maintain more consistent and reliable records for use in monitoring and evaluation. Such records would further the evidence base related to the care of orphaned and separated children.

The high prevalence of orphanhood, prior maltreatment and separation from siblings found in this study may place the child and youth residents at risk of mental health problems. Children who encounter multiple forms of psychological trauma are most at risk of mental health problems (Anda et al., 2006; Cluver, Fincham, & Seedat, 2009; Ramiro et al., 2010; Sengendo & Nambi, 1997; Whetten, Ostermann, Whetten, O'Donnell, Thielman, 2011). While findings from a recent multi-country study have challenged the traditional belief that institutionalized children have worse mental health outcomes (Whetten et al., 2009), the need for psychosocial support programs in residential care facilities has been found in other areas of sub-Saharan Africa (Morantz & Heymann, 2010; Meintjes et al, 2007; Powell et al., 2004; Powell, 2006).

The findings of this and other relevant studies lend support to the following recommendations. Although psychosocial services available in the CCIs were not formally assessed, it is likely that increased psychosocial support services would benefit the children and youth living in residential care in Uasin Gishu County, Kenya. Psychosocial support services are essential to children living in residential care to mitigate against the effects of previous experiences of maltreatment and other traumas such as the loss of parents or siblings (Morantz & Heymann, 2010; Meintjes et al, 2007; Powell et al., 2004; Powell, 2006). Intensified child welfare services, and community awareness, prevention and early intervention programs for child maltreatment are needed in the Uasin Gishu County of Kenya, and throughout sub-Saharan Africa (Ayaya, Rotich, Vreeman & Nyandiko, in press; Lachman et al., 2002; Lachman, 2004; UNICEF et al., 2004; UNICEF et al 2006). Keeping

children safe from maltreatment is an obligation laid out in the Convention on the Rights of the Child, in particular Articles 4, 19 and 32 (UNICEF, n.d.), to which Kenya is a signatory state. Government-support programs, poverty-reduction and income-generating projects are required in order to ensure that children and youth, particularly orphans, are adequately cared for in the community (Ansell & Young, 2004; Cluver, Bowes, & Gardner, 2010; Desmond, 2009; Funkquist, Eriksson, & Muula, 2007; Heymann & Kidman, 2009; Lachman et al., 2002; Powell et al., 2004; Young & Ansell, 2003). The findings of this study suggest that programs tailored to the needs of specific populations of children, such as poverty-reduction and caregiver-support programs for households caring for orphans, and community-wide initiatives to reduce and intervene in cases of child maltreatment may improve community-based care for children. Further research should address whether such programs reduce the need for institutionalization.

Conclusions

This file review carried out at five Charitable Children's Institutions in the Uasin Gishu County of Kenya revealed a high prevalence of experiences of maltreatment among child and youth residents prior to their admission. Children and youth who were separated from parents were more likely to have been admitted for maltreatment or had any prior experience of maltreatment than residents who were orphaned. The high prevalence of maltreatment suggests that improved child protection services, and maltreatment prevention and early intervention efforts in the community are required, and that treatment and psychosocial support programs are needed in residential care facilities. As half of all orphans were placed because of destitution, government support programs, poverty-reduction, and income-generating projects may improve the care of orphans in the community.

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References

Akmatov MK. Child abuse in 28 developing and transitional countries-results from the Multiple Indicator Cluster Surveys. International Journal of Epidemiology. 2011; 40:219–227. [PubMed: 20943933]

Anda RF, Felitti VJ, Bremner JD, Walker JD, Whitfield C, Perry BD, Giles WH. The enduring effects of abuse and related adverse experiences in childhood: A convergence of evidence from neurobiology and epidemiology. European Archives of Psychiatry and Clinical Neuroscience. 2006; 256:174–186. [PubMed: 16311898]

Ansell N, Young L. Enabling households to support successful migration of AIDS orphans in southern Africa. AIDS Care. 2004; 16:3–10. [PubMed: 14660139]

Atwine B, Cantor-Graae E, Banjunirwe F. Psychological distress among AIDS orphans in rural Uganda. Social Science & Medicine. 2005; 61:555–564. [PubMed: 15899315]

Ayaya S, Rotich JK, Vreeman R, Nyandiko WM. Child abuse and neglect as seen in a tertiary hospital in western Kenya: Paediatricians' perspective. East African Medical Journal. 2011; 88:366–374.

Baarøy J, Webb D. Who are the most vulnerable? disaggregating orphan categories and identifying child outcome status in Tanzania. Vulnerable Children and Youth Studies. 2008; 3:92–101.

Berry, L.; Guthrie, T. Rapid assessment: the situation of children in South Africa. Children's Institute, University of Cape Town; Cape Town: 2003.

Birdthistle IJ, Floyd S, Mwanasa S, Nyagadza A, Gwiza E, Glynn JR. Child sexual abuse and links to HIV and orphanhood in urban Zimbabwe. Journal of Epidemiology and Community Health. 2010; 65:1075–82. [PubMed: 20628080]

Case A, Paxson C, Ableidinger J, Monasch R, Boerma JT. Orphans in Africa: Parental death, poverty, and school enrollment. Demography. 2004; 41:483–508. [PubMed: 15461011]

Cluver L, Gardner F. Risk and protective factors for psychological well-being of children orphaned by AIDS in Cape Town: a qualitative study of children and caregivers' perspectives. AIDS Care. 2007; 19:318–325. [PubMed: 17453564]

Cluver L, Fincham DS, Seedat S. Posttraumatic stress in AIDS-orphaned children exposed to high levels of trauma: The protective role of perceived social support. Journal of Traumatic Stress. 2009; 22:106–112. [PubMed: 19319917]

Cluver L, Bowes L, Gardner F. Risk and protective factors for bullying victimization among AIDS-affected and vulnerable children in South Africa. Child Abuse & Neglect. 2010; 34:793–803. [PubMed: 20880588]

Cluver L, Orkin M, Boyes M, Gardner F, Meinck F. Transactional sex amongst AIDS-orphaned and AIDS-affected adolescents predicted by abuse and extreme poverty. Journal of Acquired Immune Deficiency Syndromes. 2011; 58:336–343. [PubMed: 21857361]

Desmond C. Consequences of HIV for children: Avoidable or inevitable? AIDS Care. 2009; 21:98. [PubMed: 22380983]

Funkquist A, Eriksson B, Muula AS. The vulnerability of orphans in Thyolo district, southern Malawi. Tanzania Health Research Bulletin. 2007; 9:102–109. [PubMed: 17722412]

Foster, G.; Germann, S. The Orphan Crisis. In: Essex, M.; Mboup, S.; Kanki, PJ.; Marlink, RG.; Tlou, SD., editors. AIDS in Africa 2nd Edition. Kluwer Academic/Plenum Publishers; New York: 2002. p. 664-675.

Government of Kenya. The Children (Charitable Children's Institutions) Regulations (A supplement to the Children Act, 2001). Ministry of Health Affairs. , editor. Government of Kenya; 2005. p. Legal Notice N.145

Heymann J, Earle A, Rajaraman D, Miller C, Bogen K. Extended family caring for children orphaned by AIDS: balancing essential work and caregiving in a high HIV prevalence nations. AIDS Care. 2007; 19:337–345. [PubMed: 17453567]

Heymann J, Kidman R. HIV/AIDS, declining family resources and the community safety net. AIDS Care. 2009; 21:34–42. [PubMed: 22380977]

Joint United Nations Programme on HIV/AIDS. Kenya: Oct 10. 2012 n.d.Retrievedfrom http://www.unaids.org/en/regionscountries/countries/kenya/

Kenyan Open Data Project. County Data Sheet: Uasin Gishu. 2011. Retrieved October 26, 2011 from http://opendata.go.ke/facet/counties/Uasin%20Gishu

Kidman R, Petrow SE, Heymann SJ. Africa's orphan crisis: Two community-based models of care. AIDS Care. 2007; 19:326–329. [PubMed: 17453565]

Lachman P, Poblete X, Ebigbo PO, Nyandiya-Bundy S, Bundy RP, Killian B, Doek J. Challenges facing child protection. Child Abuse and Neglect. 2002; 26:587–617. [PubMed: 12201157]

Lachman P. Understanding the current position of research in Africa as the foundation for child protection programs. Child Abuse & Neglect. 2004; 28:813–815. [PubMed: 15350766]

Mbugua T. Responding to the Special Needs of Children: Educating HIV/AIDS Orphans in Kenya. Childhood Education. 2004; 80:304–310.

Meintjes, H.; Moses, S.; Berry, L.; Mampane, R. HomeTruths: The Phenomenon of Residential Care for Children ina Time of AIDS. Children's Institute, University of Cape Town, and Pretoria, South Africa, Centre for the Study of AIDS, University of Pretoria; Cape Town, South Africa: 2007. Retrieved September 12, 2011 from http://hrbaportal.org/wp-content/files/1265306024_8_1_1_1_resfile.pdf

Miller CM, Gruskin S, Subramanian SV, Heymann J. Emerging health disparities in Botswana: examining the situation of orphans during the AIDS epidemic. Social Science & Medicine. 2007; 64:2476–2486. [PubMed: 17442471]

Monasch R, Boerma JT. Orphanhood and childcare patterns in Sub-Saharan Africa: an analysis of national surveys from 40 countries. AIDS. 2004; 18:55–S65.

Morantz G, Heymann J. Life in institutional care: the voices of children in a residential facility in Botswana. AIDS Care. 2010; 22:10–16. [PubMed: 20390476]

Nyambedha EO, Wandibba S, Aagaard-Hansen J. Changing patterns of orphan care due to the HIV epidemic in western Kenya. Social Science & Medicine. 2003; 57:301–311. [PubMed: 12765710]

Oleke C, Blystad A, Rekdal OB. "When the obvious brother is not there": Political and cultural contexts of the orphan challenge in northern Uganda. Social Science & Medicine. 2005; 61:2628–2638. [PubMed: 15979773]

Oleke C, Blystad A, Moland K, Rekdal O, Heggenhougen K. The varying vulnerability of African orphans - the case of the Langi, Northern Uganda. Childhood. 2006; 13:267–284.

Onuoha FN, Munakata T, Serumaga-Zake PA, Nyonyintono RM, Bogere SM. Negative mental health factors in children orphaned by AIDS: Natural mentoring as a palliative care. AIDS and Behavior. 2009; 13:980–988. [PubMed: 18839304]

Operario D, Underhill K, Chuong C, Cluver L. HIV infection and sexual risk behaviour among youth who have experienced orphanhood: Systematic review and meta-analysis. Journal of the International AIDS Society. 2011; 14:25–36. [PubMed: 21592368]

Powell, G.; Chinake, T.; Mudzinge, D.; Maambira, W.; Mukutiri, S. UNICEF. , editor. Children in residential care: the Zimbabwean experience. Harare. 2004. Retrieved August 31, 2011 from http://www.crin.org/docs/BCN%20-%20Children%20in%20Residential%20Care%20-%20Zimbabwe.pdf

Powell G. Children in institutional care: Lessons from Zimbabwe's experience. Journal of Social Development in Africa. 2006; 21:130–146.

Ramiro LS, Madrid BJ, Brown DW. Adverse childhood experiences (ACE) and health-risk behaviors among adults in a developing country setting. Child Abuse & Neglect. 2010; 34:842–855. [PubMed: 20888640]

Reeler, A.; Saba, J.; Bhatt, P. The role of institutional care in community based programs on orphans and vulnerable children; International Conference on AIDS; Barcelona, Spain. 2002, July; Abstract No. G12528

Reza A, Breiding MJ, Gulaid J, Mercy JA, Blanton C, Mthethwa Z, Anderson M. Sexual violence and its health consequences for female children in Swaziland: A cluster survey study. Lancet. 2009; 373:1966–1972. [PubMed: 19428100]

Schenk, K.; Williamson, J. Ethical Guidelines for Gathering Information from Children and Adolescents in International Settings. P. Council. , editor. Population Council; Washington, D.C.: 2005.

Sengendo J, Nambi J. The psychological effect of orphanhood: A study of orphans in Rakai district. Health Transition Review: The Cultural, Social, and Behavioural Determinants of Health. 1997; 7:105–124.

Stoltenborgh M, van Ijzendoorn MH, Euser EM, Bakermans-Kranenburg MJ. A global perspective on child sexual abuse: Meta-analysis of prevalence around the world. Child Maltreatment. 2011; 16(2):79–101. [PubMed: 21511741]

United Nations Children's Fund. et al. The framework for the protection, care and support of orphans and vulnerable children living in a world with HIV and AIDS. UNICEF; New York: 2004. Retrieved July 18, 2011 from, http://www.unicef.org/aids/files/Framework_English.pdf

United Nations Children's Fund. United Nations Programme on HIV/AIDS & President's Emergency Plan for AIDS Relief. Children Affected by AIDS: Africa's Orphaned and Vulnerable Generations. UNICEF. , editor. New York: 2006.

United Nations Children's Fund. Children and AIDS: Fifth Stocktaking Report, 2010. 2010. Retrieved July 18, 2011 from, http://www.childinfo.org/files/Children_and_AIDSFifth_Stocktaking_Report_2010_EN.pdf

United Nations Children's Fund. The State of the World's Children 2012: Children in an Urban World. 2012. Retrieved February 28, 2012 from, http://www.unicef.org/sowc2012/pdfs/SOWC-2012-Main-Report_EN_21Dec2011.pdf

United Nations Children's Fund. The Convention on the Rights of the Child. Protection Rights: Keeping safe from harm. n.d.Retrieved September 26, 2012 from, http://www.unicef.org/crc/files/Protection_list.pdf

Varnis S. Promoting child protection through community resources: Care arrangements for Ethiopian AIDS orphans. Northeast African Studies. 2001; 8(1):143–159.

Whetten K, Ostermann J, Whetten RA, Pence BW, O'Donnell K, Messer LC, Thielman NM. A Comparison of the Wellbeing of Orphans and Abandoned Children Ages 6-12 in Institutional and Community-Based Care Settings in 5 Less Wealthy Nations. PLoS ONE. 2009; 4:e8169. [PubMed: 20020037]

Whetten K, Ostermann J, Whetten R, O'Donnell K, Thielman N. More than the loss of a parent: Potentially traumatic events among orphaned and abandoned children. Journal of Traumatic Stress. 2011; 24:174–182. [PubMed: 21442663]

Wood K, Chase E, Aggleton P. 'Telling the truth is the best thing': Teenage orphans' experiences of parental AIDS-related illness and bereavement in Zimbabwe. Social Science & Medicine. 2006; 63:1923–1933. [PubMed: 16777307]

Preventing Child Maltreatment: a guide to taking action and generating evidence. 2006. World Health Organization & International Society for Prevention of Child Abuse and NeglectRetrieved August 23, 2011 from http://www.ispcan.org/resource/resmgr/docs/preventing_child_maltreatmen.pdf

Young L, Ansell N. Fluid households, complex families: The impacts of children's migration as a response to HIV/AIDS in southern Africa. The Professional Geographer. 2003; 55:464–476.

Table 1

Definitions of variables and possible values in the standardized data extraction tool

Variable: definition	Possible values
Orphan status: whether a child has lost one or both parents	maternal (lost mother), paternal (lost father), double (lost both parents), non-orphans
Reasons for placement: reason for a child being admitted to the CCI	abuse, neglect, abandonment, destitution, no available caregiver, unknown
Previous primary caregiver: the most responsible person with whom the resident was living prior to placement	parent(s), grandparent(s), aunt/uncle, youth-headed , "other" (other included children previously residing with a stepparent, other relatives, unrelated caregivers or on the streets)
Separation from siblings: whether a child was documented as having at least one sibling who was not placed in the CCI	yes, no, unknown
Single-parent status: whether the child was documented as having been raised by a single-parent at some point prior to placement	yes, no, unknown
Material deprivation: whether poverty was documented as having led to a child being deprived of food, medical care, clothing, shelter or schooling	yes, no, unknown

Table 2

Sociodemographic characteristics of children and youth residents of Charitable Children's Institutions (CCIs), Uasin Gishu County, Kenya

Characteristic	N (%)
Sex	
Male	257 (55.6%)
Female	205 (44.4%)
Missing/unknown	0
Age (years) at admission	
Median	6.78
Interquartile Range (IQR)	5.08
Range	0-16.7
Missing/unknown	2
Orphan Status	
Single (Maternal)	176 (38.1%)
Single (Paternal)	17 (3.7%)
Double	133 (28.8%)
Separated	93 (20.1%)
Missing/unknown[a]	43 (9.3%)
Placed with Sibling	
Yes	261 (56.5%)
No	196 (42.4%)
Missing/unknown	5 (0.01%)
Separation from Siblings	
Yes	226 (48.9%)
No	155 (33.5%)
Missing/unknown	81 (17.5%)
Previous Primary Caregiver	
Parent(s)	88 (19.0%)
Grandparent(s)	166 (35.9%)
Aunt/Uncle	75 (16.0%)
Youth-headed	40 (8.7%)
Other[b]	40 (8.7%)
Missing/unknown	53 (11.5%)
Single-Parent Family[c]	
Yes	238 (51.5%)
No	167 (36.1%)
Missing/unknown	57 (12.3%)
Material Deprivation[d]	
Yes	276 (59.7%)
No/unknown	186 (40.3%)

[a] Most of the child and youth residents with unknown or missing orphan status were found abandoned

[b] Other includes stepparent, other relative, unrelated or streets

[c] Children or youth who were raised by single-parents at some point prior to their placement

[d] Children or youth who experienced material deprivation due to poverty

Table 3

Factors associated with *being admitted for* maltreatment versus destitution or no caregiver: unadjusted and adjusted odds ratio, (95% confidence interval)

Covariates	Odds of admission for maltreatment[a] (referent admission for destitution or no caregiver)	
	Unadjusted OR	Adjusted OR[j,k]
Female sex (male referent)	0.81[c] (0.55-1.21)	0.86 (0.55-1.35)
Age ≥6 years (age < 6 referent)	0.36[d**] (0.24-0.54)	0.83 (0.51-1.37)
Previous Primary Caregiver[b] (parent referent)	0.13[e**] (0.07-0.25)	0.36[*] (0.15-0.86)
Single-parent guardian (non single-parent referent)	1.66[f**] (1.08-2.55)	1.36 (0.86-2.14)
Separated from sibling (not separated referent)	1.11[g] (0.72-1.72)	1.62[*] (1.01-2.60)
Orphan status (non-orphan referent)	0.07[h**] (0.03-0.14)	0.17[**] (0.06-0.44)

[a] Child placed for abandonment, neglect or abuse (does not include child labor) rather than destitution or no caregiver

[b] This refers to whether a child lived with their parent or another caregiver prior to placement. The referent is living with a parent.

[c] Based on residents with known reason for placement and known sex, n=442

[d] Based on residents with known reason for placement and known age, n=442

[e] Based on residents with known reason for placement and known previous primary caregiver, n=403

[f] Based on residents with known reason for placement and known single-parent status, n=394

[g] Based on residents with known reason for placement and known whether separated from sibling, n=372

[h] Based on residents with known reason for placement and known orphan status, n=408

[i] Based on residents with known reason for placement, sex, age, previous primary caregiver, single-parent status, whether separated from sibling, and orphan status, n = 367

[j] Adjustments made for previous primary caregiver (parent versus non-parent), separation from sibling, and orphan status (non-orphan versus orphan) based on the best explanatory model

[*] $0<p<0.05$

[**] $p = 0.00$

Table 4

Experiences of maltreatment[a] prior to entry into CCI among children and youth residents

Types of Maltreatment	All Residents (n=462) n (%)	Orphans[f] (n= 326) n (%)	Non-Orphans (n=93) n (%)
Any[b]	305 (66.0%)	181 (55.5%)	91 (97.8%)
Physical Abuse	38 (8.2%)	23 (7.1%)	14 (15.1%)
Sexual Abuse	10 (2.2%)	7 (2.1%)	3 (3.2%)
Psychological Abuse	128 (27.7%)	86 (26.4%)	37 (39.8%)
General Neglect[c]	118 (25.5%)	75 (23.0%)	39 (41.9%)
Medical Neglect[d]	85 (18.4%)	48 (14.7%)	25 (26.9%)
School Neglect	83 (38.1%) (residents>= 7 years on admission, n= 218)	70 (35.9%) (residents>= 7 years on admission, n= 195)	13 (65%) (residents>= 7 years on admission, n= 20)
Abandonment[e]	140 (30.3%)	41 (12.6%)	68 (73.1%)
Child Labor	61 (23.1%) (residents>= 6 years on admission, n=264)	51 (21.8%) (residents>=6 years on admission, n=234)	10 (37.0%) (residents>=6 years on admission, n=27)

[a] A child may have multiple classifications if they experienced more than one type of maltreatment prior to placement

[b] Any experience of maltreatment including all forms of abuse, neglect, abandonment or child labor

[c] Evidence of caregiver failure to provide conditions for emotional development, shelter and safe living conditions

[d] Evidence of malnutrition, or severe, untreated illness on admission

[e] Any experience of abandonment by family members, excluding mother-headed family with unknown father

[f] Single or double orphans

Table 5

Factors associated with *having experienced* maltreatment prior to CCI admission: unadjusted and adjusted odds ratio, (95% confidence interval, CI)

Covariates	*Experienced maltreatment*[a] (referent no documented experiences of maltreatment)	
	Unadjusted OR (95% CI)	Adjusted OR (95% CI)[i,j]
Female sex (male referent)	0.70[c] (0.46-1.04)	0.61[*] (0.39-0.95)
Age ≥6 years (age < 6 referent)	0.57[d*] (0.38-0.87)	1.20 (0.73-1.99)
Previous Primary Caregiver[b] (parent referent)	0.12[e**] (0.05-0.28)	0.64 (0.23-1.77)
Single-parent guardian (non single-parent referent)	1.11[f] (0.72-1.71)	0.85 (0.54-1.35)
Separated from sibling (not separated referent)	1.38[g] (0.89-2.14)	1.76[*] (1.10-2.80)
Orphan status (non-orphan referent)	0.03[h**] (0.00-0.11)	0.04[**] (0.01-0.17)

[a] Child has previously experienced abandonment, neglect, or abuse and/or engaged in child labor

[b] This refers to whether a child lived with their parent or another caregiver prior to placement. The referent is living with a non-parent.

[c] Based on residents with known sex, n=462

[d] Based on residents with known age, n=460

[e] Based on residents with known previous primary caregiver, n=409

[f] Based on residents with known single-parent status, n=405

[g] Based on residents known whether separated from sibling, n=381

[h] Based on residents with known orphan status, n=419

[i] Based on residents with known reason for placement, sex, age, previous primary caregiver, single-parent status, whether separated from sibling, and orphan status, n = 371

[j] Adjustments made for sex (male referent), separation from sibling, and orphan status (non-orphan versus orphan) based on the best explanatory model

[*] $0<p<0.05$

[**] $p = 0.00$