Changes in Household Composition and Orphan's Living Situations in Selected Sub-Saharan African Countries Affected by HIV/AIDS

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Abstract

The study utilized available Demographic and Health Surveys (DHS) data to examine the changes in household composition and orphaned children's living arrangements in countries most affected by HIV/AIDS in Africa. The paper highlights the increasing dependency burdens for working age adults and the importance of child-parent relationship to child schooling. The results show that in the past decade the dependency ratios in most countries have increased nationally and excessively in rural than urban areas. "Non-relative" child fosterage an uncommon practice in Africa has also increased in most countries. The results also indicate that, controlling for other factors, orphaned children, children living in households headed by non-relatives or non-working age are less likely to be enrolled in school. Overall, the findings suggest that the long-term effects of HIV/AIDS epidemic include changes in family structures and child fosterage practices that further affect children's welfare. Therefore there is urgent need to find creative ways to modify existing intervention programs to meet the needs of children and keep pace with the changing situations.

Background

The HIV/AIDS pandemic has lasting multidimensional effects that pose unique challenges to development efforts in many nations. One such effect is the rapid increase in the number of orphans and vulnerable children as parents fall victim to AIDS. Indeed, recent studies have indicated that there is a strong correlation between the national adult HIV prevalence rate and percentage of orphans in the population[1]. An estimated 13 million children under age 15 had lost either one or both parents to AIDS by 2001. This figure is expected to increase to about 25 million by 2010. More than 90% of the orphaned children live in sub-Saharan Africa where HIV/AIDS prevalence is highest in the world. Consequently, the number of working age adults is decreasing due to AIDS related deaths and the living conditions for orphaned children have changed making them more vulnerable to a variety of risks, including dropping out of school, malnutrition, and other forms of child deprivation.

Purpose

The overall goal of this study is to examine the changes in household composition, living arrangements of orphans, and children's school enrollment status in sub-Saharan Africa. The analysis provides information about the characteristics of communities where orphaned children reside within countries and their living situations, which is necessary for national and targeted policies to care for orphans and other vulnerable children.

Objectives

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[1] Bicego, et al. 2003

1. Provide information on the increasing dependency burdens on the working-age populations (dependency ratios) in communities and the changes in household age composition that have occurred over time across the HIV-burdened countries.
2. Describe the trends and differences in living arrangements (relationship to the household head) for single orphans and for double orphans.
3. Determine the extent to which children's living circumstances affect their school enrollment, considering the sex and age of child, sex and age of household head, socioeconomic status, and other living conditions within countries, and determine how they differ for orphans and non-orphans.

Methodology

The study utilized available Demographic and Health Surveys (DHS) data collected between 1990 and 2002, which provided lists of all usual members living in the household. Dependency ratios were analyzed using data from all household members. The analysis of child situations looked at children aged less than 15 years, while analysis of school enrollment looked at ages 6 to 17 years, with some further analysis on children aged 6 to 14 only. The surveys provided data on orphans through household schedules in which information on the parental survival status for each member under age 15 was collected. Chi-Square and logistic regression analyses were used to evaluate the relationship between orphan status and school enrollment.

Findings

Finding I: **Changes in Household Composition and Increasing Dependency Burdens, 1990-2000**

- Life expectancy has dropped significantly (by more than 4 years) in all countries except Nigeria and Uganda, mainly because of high HIV/AIDS related deaths.
- Countries with two surveys show that the dependency ratios have increased nationally (Namibia and Zambia), despite significant fertility declines in these countries (Fig. 1).
- The dependency ratios also increased excessively in rural areas while remaining constant or declining in urban areas in Namibia, Rwanda, Tanzania, Uganda, and Zambia, irrespective of the size of their total fertility changes.
- In Rwanda, the dependency ratio increased in both rural and urban areas, indicating an overall increase of the proportion of children to working age adults, because of high adult mortality during the civil war.

Country	TFR Changes		Life Expectancy		DR Changes		HIV Rate	Orphan Rate
Years/Surveys	1st	2nd	1990	2000	1st	2nd	2003	2nd
Cote d'Ivoire	5.3	5.2	47.0	43.1	103	95	9.7	6.1
Ethiopia	-	5.5	45.7	42.3	-	101	6.4	10.7
Kenya	5.4	4.7	53.1	46.0	120	104	15.0	9.5

Mozambique	-	**5.2**	**45.2**	**41.2**	-	**106**	**13.0**	**12.2**
Namibia	**5.4**	**4.2**	**60.6**	**49.2**	**104**	**109**	**22.5**	**11.3**
Nigeria	**6.0**	**4.7**	**52.7**	**52.3**	**117**	**101**	**5.8**	**6.0**
Rwanda	**6.2**	**5.8**	**46.2**	**39.7**	**115**	**114**	**8.9**	**27.6**
South Africa	-	**2.9**	**62.8**	**53.0**	-	**87**	**20.1**	**10.3**
Tanzania	**6.2**	**5.6**	**49.9**	**45.0**	**108**	**108**	**7.8**	**8.8**
Uganda	**6.9**	**6.9**	**45.4**	**43.7**	**127**	**128**	**5.0**	**12.6**
Zambia	**6.5**	**5.9**	**39.4**	**35.5**	**102**	**108**	**21.5**	**15.0**

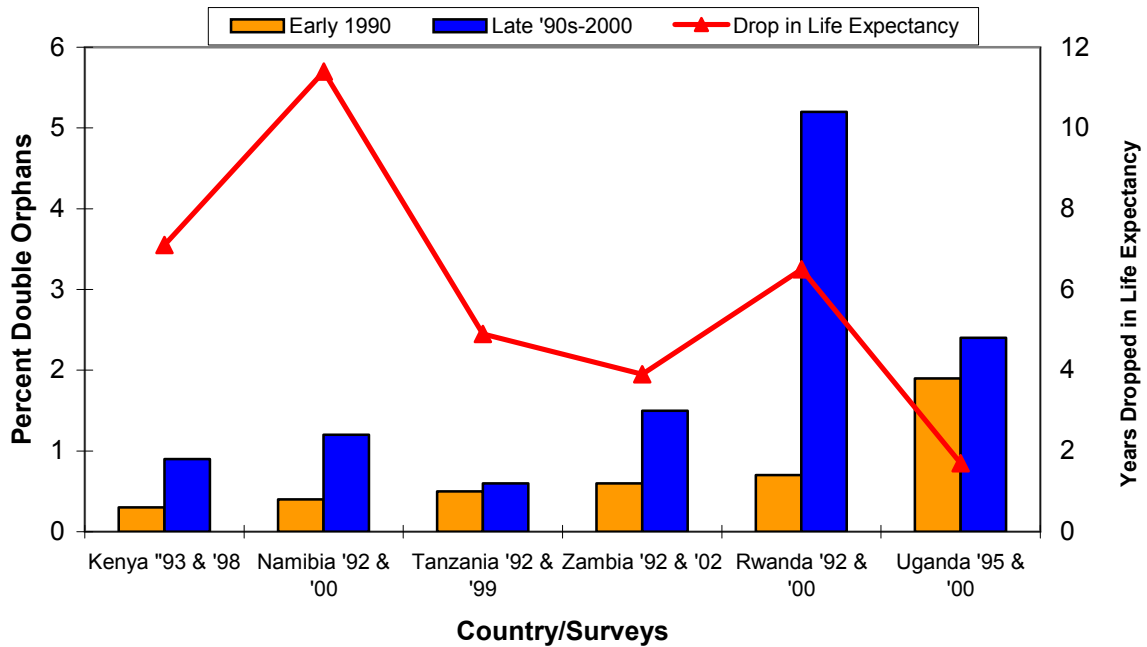**Data Sources: DHS; U.S. Census Bureau, 2003**

Finding II: **Where Do Most Orphans Reside Within Each Country?**

- **Rwanda 2000** – Northwest (31.2%), Central-South (28.5%), and Kigali (28.4%).
- **Zambia 2002** – Central (18.3%), Lusaka (17.3%), and Southern (16.0%).
- **Uganda 2000** – Central (16.9%) and Western (13.4%).
- **Mozambique 1997** – Inhambane (15.0%), Gaza (14.9%), Tete (14.3%), Zamb'zia (13.6%), Manica (13.1%), and Cabo Delgado (13%).
- **Namibia 2000** – Northwest (13.7%) and Northeast (13.4%).
- **Ethiopia 2000** – Addis (15.7%), Affar (20.7%), and Somali (14.4%).
- **South Africa 1998** – Eastern Cape (12.5%) and Kwazulu (11.7%).
- **Kenya 1998** – Nyanza (14%), Coast (10.3%), and Eastern (9.7%).
- **Tanzania 1999** – Southern Highland (14.3%), and Central (9.3%).
- **Nigeria 1999** – South East region (11%).

Finding III: **Trends of Double Orphans Prevalence Rates: Is HIV/AIDS Responsible?**
- The percentage of double orphans has significantly increased in all countries shown.
- Life expectancy has dropped across all countries.
- Countries with the highest percentage of double orphans were also the same ones with the highest drop in number of years of life expectancy suggesting that the high HIV/AIDS rates may be responsible (Figure 1).
- Rwanda has the largest increase of double orphans and Uganda the least change.

Figure 1: Trends of Double Orphans and Life Expectancy Decline, 1990-2000
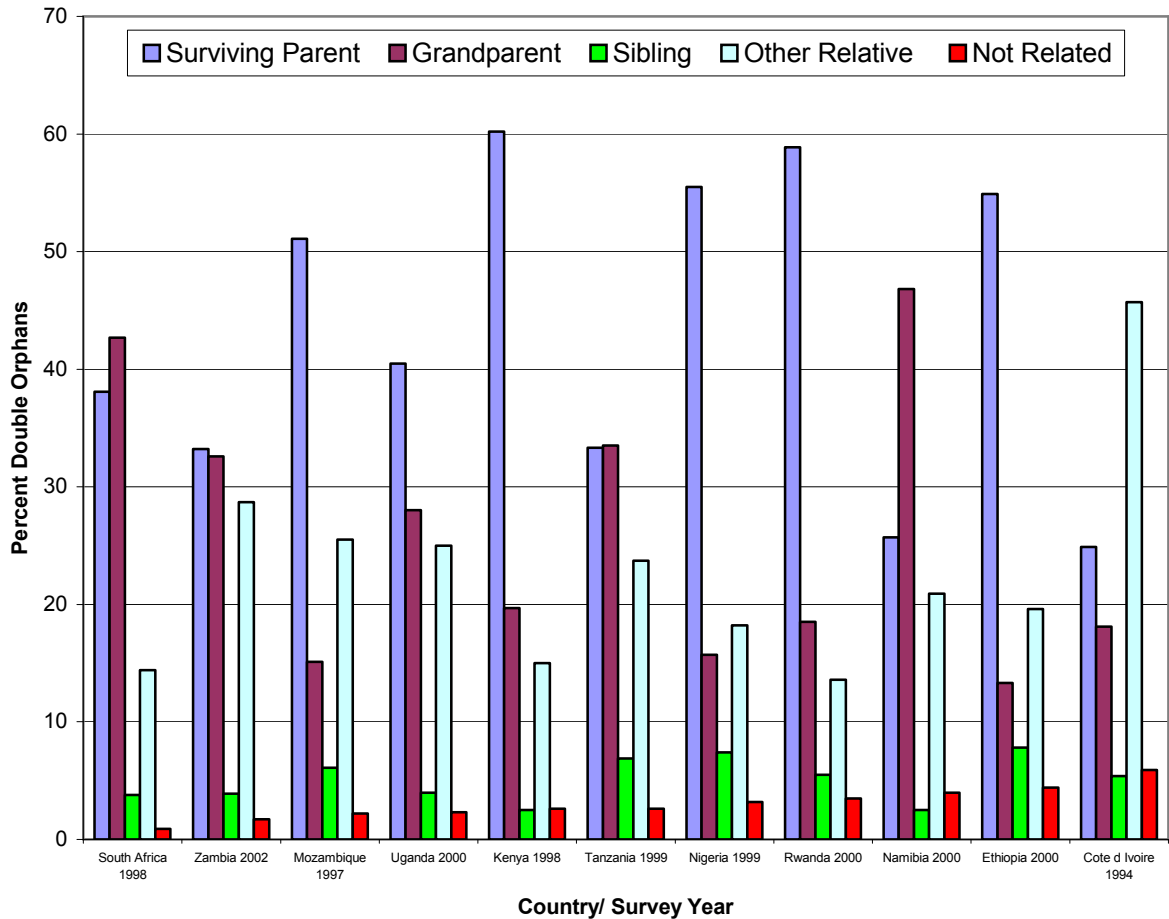

Finding IV: **Household Living Circumstances for Orphans Aged 0-14 Years**

- In all countries a large proportion of orphans live in female-headed households than non-orphans.
- A higher proportion of orphans live in households headed by children or elderly persons compared to non-orphans in all countries.
- Higher proportions of orphaned children live in poorer households compared to non-orphans in most countries (Kenya, Mozambique, Namibia, Rwanda, South Africa, Tanzania, and Uganda).
- A high proportion of orphans live in rural areas in Kenya, Namibia, and Nigeria, but for Cote d'Ivoire, Ethiopia, Uganda, and Zambia a larger percentage of orphans live in urban compared to non-orphans.
- A higher percentage of older children have lost one or both parents than younger children.

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Finding V: **Living Arrangements for Orphaned Children (0-14 Years)**

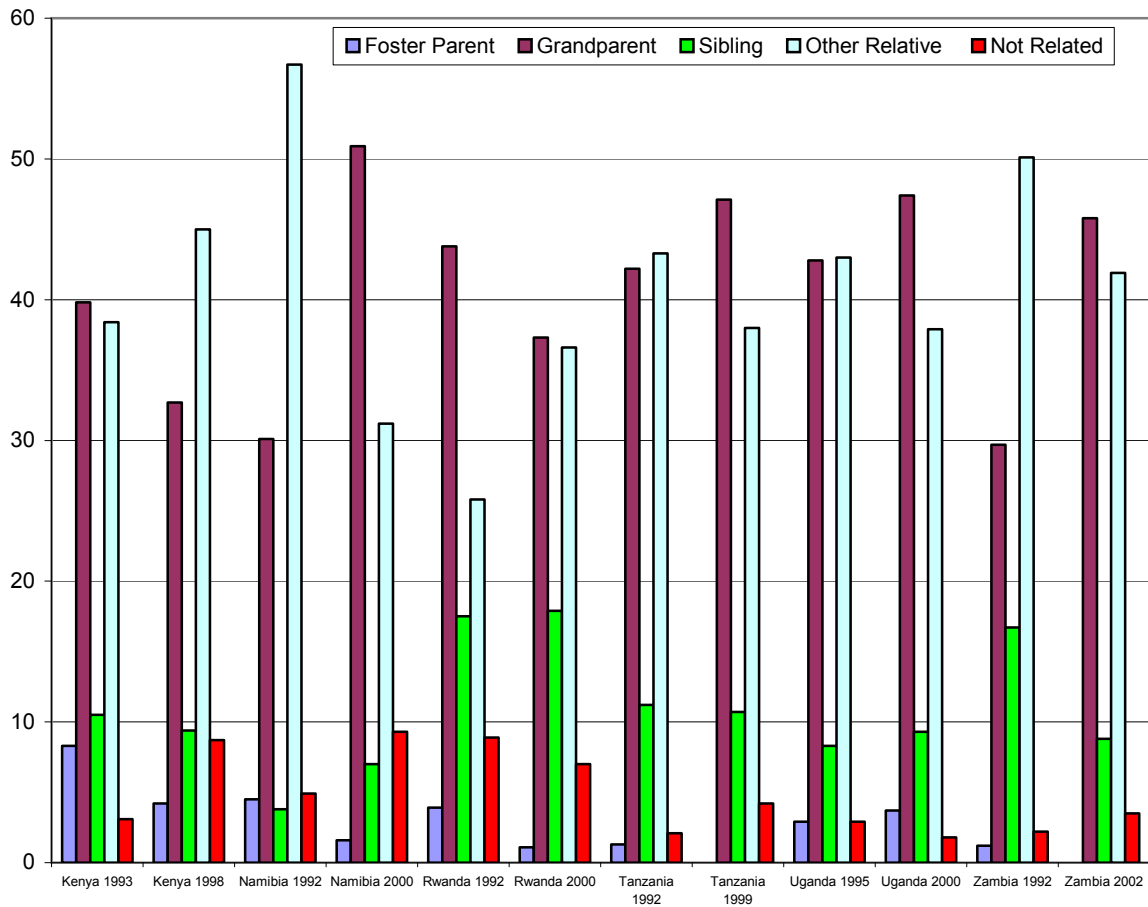**Figure 2: Living Arrangements for All Orphaned Children (0-14) Years**

- Orphaned children living with non-relatives range from 1 percent in South Africa to about 6 percent in Cote d'Ivoire.
- High percent of orphans live with surviving parent except in Cote d'Ivoire and Namibia where "Other Relatives" and grandparents are the main caregivers, respectively.

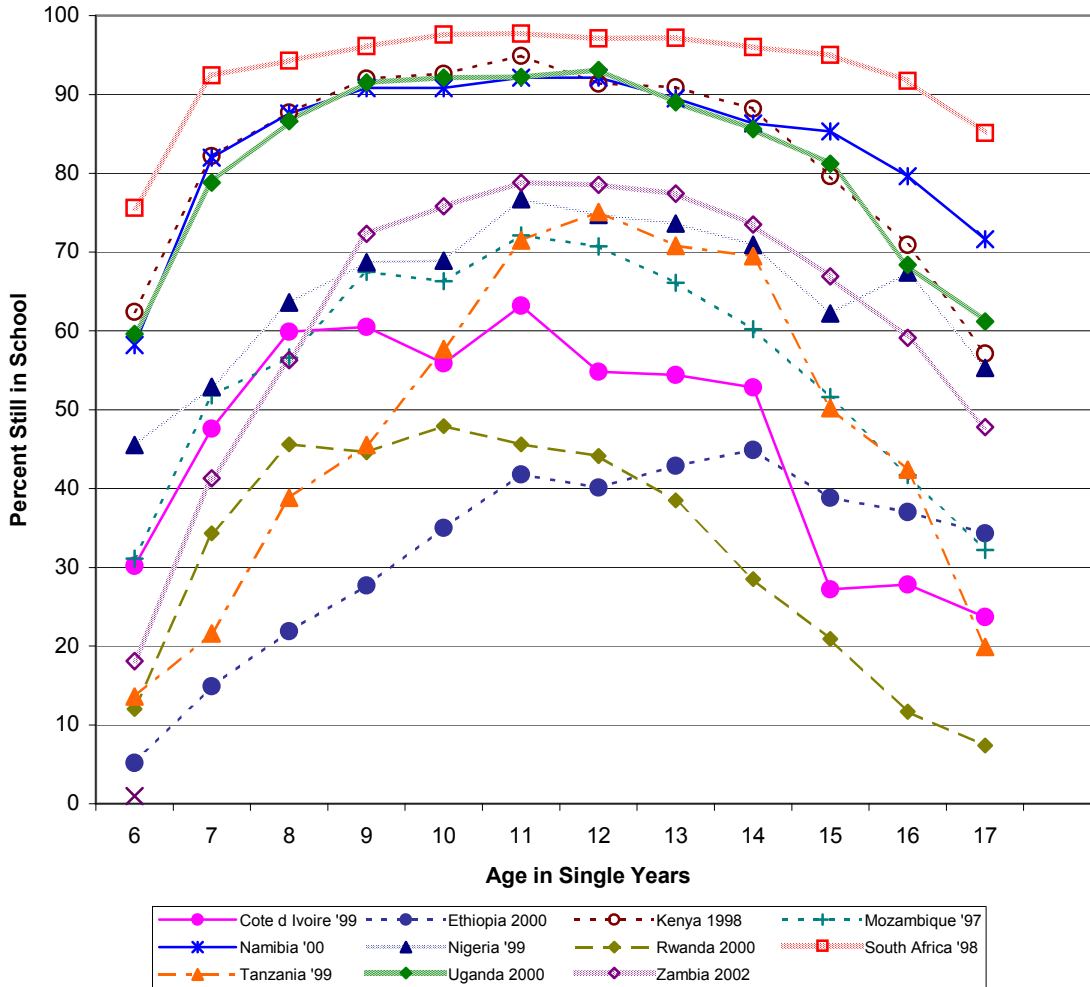## Finding VI: Changes in Living Arrangements for Double Orphans, 1992-2002

In general, the data suggest a trend toward orphans living under the care of relatives other than grandparents and siblings and increasingly of non-relatives (once uncommon in Africa).

Figure 3: Changes in Living Arrangements for Double Orphans by Country

Figure 4: Percent Children Aged (6-17 Years) Currently Enrolled in School by Age

- Overall enrollment is very low in Ethiopia and Rwanda (<50%) across all ages
- Enrollment is highest in South Africa, Uganda, Kenya, and Namibia.
- The greatest proportion of children enrolled in school occurs between ages 10 to 12 years for all countries.
- The percentage of children currently enrolled in school starts to drop after age 13.

Significant Factors Influencing School Enrollment for Children (6-14 Yrs) by Country

Country/Survey Year	Orphan Status	Sub-Region	SES	Age of Child	Relationship to HH*	Rural /Urban	Sex of HH*	Age of HH*	Sex of Child	HH Size
Cote d'Ivoire, '94	NS	√	√	√	√	NS	√	√	√	√
Ethiopia, 2000	√	√	√	√	√	√	NS	NS	√	NS
Kenya, '98	√	√	√	√	√	NS	NS	√	NS	NS
Mozambique, '97	√	√	√	√	√	√	NS	√	√	√
Namibia, 2000	NS	√	√	√	√	√	√	NS	√	NS
Nigeria, '99	√	√	√	√	√	NS	√	√	√	√
Rwanda, 2000	√	√	√	√	√	√	NS	NS	NS	NS
South Africa, '98	NS	√	√	√	√	NS	NS	NS	√	NS
Tanzania, '99	√	√	√	√	√	√	√	√	√	√
Uganda, 2000	NS	√	√	√	√	NS	NS	NS	NS	√
Zambia, 2002	√	√	√	√	√	√	NS	NS	NS	√

√ = Sign. HH* – Household Head; NS- Not significant; N/A – No data on this indicator; SES = Socioeconomic Status

- Sub-region of residence, household socioeconomic status, age of child, and child's relationship to head of household are major determinants for school enrollment in all countries.
- Orphan status is an important factor in school enrollment in most countries (7 out of 11).
- Other factors that are key to school enrollment in some countries are rural/urban residence, age and sex of household head, age and sex of child, and household size.

Significance of the Research

- The information obtained from this research can guide the administrative decisions on program activities and policies for orphaned and other vulnerable children.
- Although there is a consensus among development agencies and governments that communities and extended families provide the best option to support and care for orphans, it is also important to be cognizant that while communities and households are refuges for children, they can also be sources of risks as indicated in this study.

Conclusions

- The vulnerabilities that children face differ from household to household and community to community. Thus, no single policy can be suitable for all countries.
- In addition to designing a national strategy to deal with AIDS and its impact on children, there is an urgent need to target interventions to regions with large orphaned populations as identified in this study.

- Community-based training and education programs are needed to prepare non-parental caregivers (such as grandparents) for orphan care.
- Children living with extended relatives and non-relatives may be disadvantaged or need protection from exploitation. National policies should be designed to protect these children from exploitation as child workers and also to provide subsidized or free primary education for children affected by HIV/AIDS.
- Interventions and information, education, and communication strategies should be targeted toward women, because most orphans live in female-headed households.
- Given that country differentials in child school enrollment exist, country studies child-fostering practices are desirable to examine the socio-cultural factors that affect children's welfare and how they can be addressed.
- Migration is an important aspect that research needs to address in order to determine how the HIV/AIDS pandemic is affecting country demographics especially dependency ratios and also to understand the changes in orphan prevalence rates.