

7-26-2010

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### Recommended Citation

Ciganda, Daniel; Gagnon, Alain; and Tenkorang, Eric (2010) "Child and Young Adult Headed Households in the Context of the AIDS Epidemic in Zimbabwe, 1988-2006," *PSC Discussion Papers Series*: Vol. 24: Iss. 4, Article 1.  
Available at: <http://ir.lib.uwo.ca/pscpapers/vol24/iss4/1>

# **Child and Young Adult Headed Households in the Context of the AIDS Epidemic in Zimbabwe, 1988-2006**

Discussion Paper No. 10-04

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This paper was presented at the Population Association of America 2010 meeting in Dallas, session: "Family Structure and HIV/AIDS in Sub-Saharan Africa".

26 July 2010

On the web in PDF format: <http://sociology.uwo.ca/popstudies/dp/dp10-04.pdf>

The views expressed herein are those of the authors and do not necessarily represent the official policy of the Department of Canadian Heritage. Financial contribution from the Multiculturalism and Human Rights Program is gratefully acknowledged.

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# Child and Young Adult Headed Households in the Context of the AIDS Epidemic in Zimbabwe, 1988-2006

## **Abstract**

The emergence of Child-Headed Households (CHH) and Young Adult Households (YAH) has largely been taken as an indicator of the erosion of the traditional safety nets in sub-Saharan countries and a direct consequence of the increasing number of orphans in the region. However, the initial evidence presented so far suggests that the process of formation of CHH and YAH is more complex than it appears to be. Using the four available waves of the Zimbabwe Demographic and Health Surveys (1988, 1994, 1999, and 2005/2006) we find that the proportion of households with no adults have remained stable in the last years, although the number of orphans have increased significantly. In fact, a large number of children living in CHH are non-orphans, which suggests that this kind of living arrangements is not always a direct consequence of parental death. Moreover, our analysis show that children living in CHH and YAH are less likely to have unmet basic needs than children in households headed by working-age adults and other vulnerable households.

**Keywords:** *Child-Headed Households, AIDS, Orphans, Zimbabwe*

## Introduction

As the AIDS epidemic grows, countries in sub-Saharan Africa are faced with the major challenge of caring for orphans and vulnerable children (OVCs). The United Nations has projected for instance that the number of orphaned children in the region will reach 15.7 million by 2010 (Unicef 2006). In most sub-Saharan African countries including Zimbabwe, the extended family has traditionally acted as a safety net for the majority of orphaned children (Monash and Boerma, 2004) but as prevalence rates increase, the capacity of the community to provide care and protection for OVCs is threatened (Heymann et al 2007; Kidman & Heymann, 2008; Madhavan, 2004; Foster, 2000; Unicef 2006; Mtika, 2001; Ntozi & Zirimenya, 1999).

In this context, the identification of particularly vulnerable groups is a key in organizing effective support systems. So far the focus has been centered on orphans, with studies usually looking at the gaps between orphans and non-orphans on various outcomes. Although it has been shown that losing a parent (or both) affects children's schooling, no conclusive evidence has been found on other outcomes such as health, nutritional status or the satisfaction of basic needs (Mishra & Bignami-Van Assche, 2008). In this paper we propose a different approach to assess the effect of AIDS on children. Instead of concentrating on orphanhood, we shift our focus to the structure of the households. This gives us the chance not only to analyze what kind of living arrangements present greater risks for children's well being but also to identify those situations that require most urgent attention.

This study is organized in two parts. First, we examine the evolution of the proportions of children living in four types of vulnerable living arrangements: 1-Child-Headed Households (CHH) (all members are under 18 years of age.) 2-Young Adult Households (YAH) (households headed by young adults under 25 years of age) 3-Skip-generation Households (children and older adults only), and 4-Households with sick members. These are compared with 5- Households with healthy, working-age adults, which are considered less vulnerable. For this first section we use the four available waves of the DHS in Zimbabwe (1988, 1994, 1999, and 2005/2006).

In the second section, we estimate the effects of the above living arrangements on the well being of children using a logistic regression model. The model estimates the extent to which living with no adults (in CHH or YAH), living with older adults, or living with sick adults affects the odds of having unmet basic needs, after controlling for socioeconomic status, urban-rural differences, orphan status and age. This second section, however, uses the last available wave of the DHS surveys (2005/6).

In sub-Saharan Africa child-fostering has traditionally been a common function of the extended family in response to the death of biological parents or economic hardship or for religious training, education, alliance building and kinship obligations (Isiugo-Abanihe, 1985; Madhavan, 2004). It is therefore not uncommon for children in Africa, south of the Sahara, to live in households headed by other relatives and non-relatives, even when their biological parents are still alive (Urassa et al 1997; Foster, 2000). In fact, the existence of this "purposive fostering" has been identified as one of the explanations for the lack of differences between orphans and non-orphans; an orphan would not receive differential treatment in a context where a large number of children are reared by adults other than their parents (Urassa, 1997). It is worth noting that purposive fostering is significant in Zimbabwe, as over one-quarter of children do not live with their biological parents (Central Statistical Office –Zimbabwe, 2007).

Over the last three decades, the safety nets structured around kinship relations have undergone significant changes as a result of the growing number of terminally ill adults and orphaned children in countries with high HIV/AIDS prevalence. In Namibia, for instance, health care practitioners and community leaders have reported that it is becoming more difficult to find caregivers for orphans, both within and outside the extended family (Kuhanen et al, 2008). In Zimbabwe, recent estimations have shown how the availability of caregivers for orphans (grandparents, aunts, uncles and older siblings) will be significantly reduced in the near future (Zagheni, 2010).

In Zimbabwe, as in other societies predominantly organized around patrilineal kinship systems, paternal aunts and uncles are considered the "natural" guardians for orphaned children, especially as traditions and customs demand that the wife's father pays the bride price (Foster, 2000). Foster (1995, 2000) notes that the traditional fosterage system in this country has witnessed two major adaptive shifts: an increase in the participation of maternal relatives as caregivers of orphan and vulnerable children, and a growing number of grandparents and older adults assuming this responsibility. This latter trend has resulted in a significant increase in the number of Skip-Generation Households (households composed of children and older adults only).

The emergence of Child-Headed Households (CHH) and Young Adult Households (YAH) in Zimbabwe is considered one of several indicators of the weakening of the traditional safety nets. Since the publication of the seminal works of Foster (1995; 1997), the predominant idea has been that these type of households are primarily a result of the increasing adult mortality, mainly due to HIV/AIDS. In countries affected by social unrest, as in the case of Rwanda, violent conflict has also led to the emergence of child-headed households (MacLellan, 2005; ACORD, 2001). Whatever the cause, the existence of CHH is usually considered a particularly vulnerable situation as children and young adults who lack the necessary experience and skills to support a household and meet the basic needs of their siblings are left on their own. Even though the proportion of households without adults (>24) is still relatively low in countries with high orphanhood prevalence (Monash and Boerma, 2004, UNICEF 2006), a number of studies, mostly qualitative, have depicted these households as representing the lowest range of the vulnerability continuum (Ayieko, 1997; Foster, 1997; Thurman et al, 2006; Schenk et al 2008; Kuhanen et al, 2008, MacLellan, 2005; ACORD 2001), the last resort of an extended family under strain.

To date, few studies using large scale quantitative data have been conducted on the evolution of CHH and YAH (Meintjes et al, 2010, Ritcher and Desmond, 2008), and little is known about the health and educational outcomes of children in such living arrangements. The paucity of data in this area might be due to the relatively low proportion of these types of households. It may also be attributed to data collection problems associated with the absence of adults who can provide accurate information on the household and its members. The latter may be a particularly relevant problem in the case of the DHS, which require the presence of an adult (>15) to respond to the household members' questionnaire. Fortunately, the DHS have been collecting information on households with no adults in Zimbabwe since 1988. Even though the proportion of CHH and YAH are presumably underestimated, this information is key to improve our understanding of the dynamics behind their emergence and the situation of children living in them.

Initial evidence from South Africa by Ritcher and Desmond (2008) has suggested that children living in CHH and YAH might be equally or less vulnerable than those living in other types of arrangements. The authors showed that households headed by young individuals were not only less economically vulnerable (measured by household's monthly expenditures) than households with working-age adults, but also less likely to report occasional child hunger (Ritcher and Desmond 2008). Similarly, Germann (2006) reported that almost 70% of 105 children that are

heads of a household in Zimbabwe had medium to satisfactory quality of life. In a qualitative study in Namibia, Ruiz-Casares (2009) explains these counterintuitive findings as mainly due to what she termed “functional” CHH and YAH, which in some cases are established to help children from remote areas having access to schools.

Regarding the evolution of CHH and YAH, a recent study in South Africa showed that the numbers of CHH have not increased since 2000 and that, for a vast majority of children in such households, one or both parents are in fact alive but live elsewhere (Meintjes et al, 2010). In a follow up to this study the authors analyzed 18 countries<sup>1</sup> in sub-Saharan Africa, finding that the proportion of children in CHH with both parents alive ranges between 56% (Swaziland) and 98% (Burkina Faso). These results contradict established ideas about CHH and underscore the need to improve our understanding of how living arrangements shape the opportunities and risks of orphans and vulnerable children in sub-Saharan Africa.

## **Data & Methods:**

### *Study population*

We used data from the four available waves of the Zimbabwe Demographic and Health Surveys (ZDHS) undertaken by the Central Statistical Office (CSO) in 1988, 1994, 1999 and 2005/6 as part of the Zimbabwe National Household Survey Capability Programme (ZNHSCP) and the worldwide MEASURE DHS programme.

The sample was stratified according to land-use and selected in two stages with enumeration areas (EAs) as the first-stage and households as the second-stage sampling units. The enumeration areas were selected with probability proportional to size, according to the number of households in each EAs in the 1982 Zimbabwe Master Sample (ZMS), the 1992 ZMS and the 2002 ZMS respectively. Both the 1994 and 1999 ZDHS used the 1992 ZMS as the sample frame. Institutional populations (army barracks, hospitals, police camps, etc.) were not included in any of the samples.

The four waves are nationally representative (excluding the population in communal households), and the 1994, 1999 and 2005/6 waves are representative at the provincial level as well. Sampling weights were used to obtain national level estimates, with the exception of the 1988 ZDHS.

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<sup>1</sup> Benin, Burkina Faso, Burundi, Comoros, Congo DR, Ethiopia, Ghana, Kenya, Malawi, Mozambique, Namibia, Niger, Nigeria, South Africa, Swaziland, Sudan, Tanzania, Zambia.

## *Measures*

Our main independent variable of interest is living arrangement, which we divided in five categories as in the following.

**Child-Headed Households:** We define Child-Headed Households as those in which all members are under 18 years of age. An alternative definition would include households in which the person identified as head is under 18 years of age, even when other adults are listed in the household<sup>2</sup>. Although we acknowledge there might be cases where children actually run households where adults are present (ex. when those adults are too old or sick to be in charge), we privilege the first definition both for comparison purposes and due to the fact that it is not possible to determine the head of households with the information provided in the first wave of DHS surveys.

Although in most countries age 18 is the marker of legal majority, we assume that children living in households headed by young adults between 18 and 24 years old face similar difficulties as those in CHH. In fact, many households that start as child-headed may change their status when the head turns 18 years old, without qualitatively changing their situation. Following this rationale we grouped the two categories for the multivariate analysis, which allowed us to obtain robust standard errors.

**Young Adult Households:** Thus, children living in households headed by young adults under 25 years of age have been considered vulnerable in a number of studies, although the label used to describe these living arrangements usually differ. Some have referred to households headed by young adults between 18-25 as “Adolescent-Headed Households” (Foster et al, 1997). However, we agree with Kuhanen et al (2008) about the need to redefine this label, taking into account that the concept of adolescence (in a western sense) does not exist in many African cultures, where the transition to adulthood is shorter (Kuhanen et al, 2008). In this paper we use the term “Young Adult Households” for those living arrangements composed exclusively of members less than 25 years of age. However, since analyses are conducted only for children under 18 years old, the heads are not included in the estimations themselves. We also exclude the sons and daughters of these young adults since what we attempt capturing are not independent households headed by young parents (which are generally considered adult-headed households), but young adults taking care of siblings and other children in need of protection. Although these households also represent a vulnerable situation, they should be relatively better positioned than CHH. The older age of the head means not only additional life experience, capacity to work and involvement in the community, but also the capacity to legally represent the children living in the household and have access to grants and other kinds of formal support from government and other institutions.

**Skip-Generation Households:** As mentioned before, the term refers to households composed exclusively of children under 18 and adults over 59 years of age. This type of living arrangement is increasing in frequency in many sub-Saharan African countries as grandparents assume the responsibility for an ever-growing number of orphans. Having no working-age adults, these households might face especially hard economic conditions and other difficulties related to the advanced age of the heads of household.

**Households with sick members:** In these households, there is at least one working-age adult (25-59, relative or other) who is chronically ill. Children living in this type of household are also

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<sup>2</sup> It is also worth mention that the situation of households headed by children (<18) that have adult members is extremely rare, less than 0.1% of the total households in 2005.

more likely to experience difficulties due to the elevated cost of supporting sick members (frequently affected by HIV/AIDS).

Adult-Headed Households: Include the households headed by working-age, healthy adults.

In brief:

*Child-Headed Households (CHH):* All household members are under 18 years of age.

*Young Adult Households (YAH):* All household members are under 25 years of age, excluding households with parent-child relationships.

*Skip Generation:* All household members are under 18 or over 59 years of age.

*Households with Sick Members:* One or more household members are chronically ill (18-59 years of age).

*Adult Headed (reference category):* Households with healthy working-age adults (25-59) and young adults (18-24) living with their biological children.

We also used a series of control variables in order to adjust the results for possible coincidental associations.

Orphans: We use the conventional definition of orphan, which includes three categories: Maternal orphan – every child under 18 years old whose mother has died but whose father is alive; Paternal orphan – every child under 18 years old whose father has died but whose mother is still alive; Double orphan – a child under 18 years who has lost both biological parents.

Socioeconomic Status (SES): The Wealth Index is a composite measure included in the DHS surveys. It is used to measure the cumulative living standard of a household. The index considers ownership of selected assets by the household, as well as materials used for housing construction and types of water access and sanitation facilities. The index aggregates the households in five categories that we collapsed into two categories: Poor and not poor in the first section, and three categories: Poor, middle, rich, for the multivariate analysis.

Number of children in the household: Households were divided into three categories according to the number of children (below 18 years old) living in them: <1, 2 to 4 and >5.

Place of residence: Urban/rural, defined as in the DHS survey (Central Statistical Office, 1989).



### *Multivariate analysis*

The 2005/6 wave of the DHS surveys in Zimbabwe included a series of modules that allow for a better assessment of the general well being of children, taking into account several dimensions such as school attendance, nutrition, use of mosquito net and basic needs. However, given the relatively small number of CHH and YAH it is not possible to draw statistically sound comparisons between different types of living arrangements, with the exception of the satisfaction of basic needs.

Thus, basic needs satisfaction was used as our dependent variable. To collect information on basic needs coverage respondents were asked whether or not each child (between 5 and 17 years of age) listed in the household had a blanket, a pair of shoes and at least two sets of clothes. Using this information we created an index of unmet basic needs that is equal to 0 when children have all three elements and 1 when at least one of the basic needs is unmet.

We use a binary logit model to estimate the effects of different types of living arrangements on the odds of having unmet basic needs. The control variables included in the model were: Place of residence (0=rural, 1=urban), orphan status (0=both parents alive, 1=orphan), SES (0=poor, 1=middle, 2=rich), age group (0=5-9, 1=10-14, 3=15-17). Clustering at the household-level was accounted for obtaining robust standard errors. Analyses were done using STATA.

## **Results**

Results from Table 1 indicate that the proportion of orphans in Zimbabwe has increased steadily over the ten-year period under observation. While the percentage of double orphans increased from 1% to 5% over 1994-2006, that of maternal and paternal orphans also increased from 2-3.4% and 6.4-13.0% respectively. It is important to note that the gap between paternal and maternal orphans may be overestimated due to misreporting as in some cases fathers that are not in contact with their families are reported as dead (Udjo, 1998 in Ritcher & Desmond, 2008). Some authors also observe that widows sometimes declare children conceived with brothers of their deceased husband as having lost their fathers (Nyamukapa et al, 2003). Other substantive reasons for the percentage differences observed between maternal and paternal orphans include the older average age of fathers, the higher prevalence among males during the initial phase of the AIDS epidemic and the higher (not AIDS-related) mortality among men (Nyamukapa et al, 2003).

**Table 1 – Proportion of children by orphan status 1994-2006 –Children aged 0-14-**

	1994 % (95% CI)	1999 % (95% CI)	2005/6 % (95% CI)
<i>Both parents alive</i>	90.9 (90-91)	85.7 (85-86)	78.1 (77-79)
<i>Maternal Orphans</i>	2.0 (1.7-2.2)	2.9 (2.6-3.2)	3.4 (3.1-3.7)
<i>Paternal Orphans</i>	6.4 (5.9-6.8)	9.3 (8.7-9.8)	13.0 (12-14)
<i>Double Orphans</i>	0.7 (0.6-0.8)	2.1 (1.8-2.4)	5.5 (5.1-5.9)
<i>Total</i>	100.0	100.0	100.0

*Source: Own calculations based on DHS data*

Table 1 also shows that the proportion of children living in CHH has increased since 1988, albeit that represents a small proportion of the total number of children. However, the 0.7% in 2006 (Table 2) is relatively high when compared with other Sub-Saharan countries where the percentage of children living in CHH rarely exceeds the 0.5% according to our own overview of the latest available waves of the DHS surveys.

The proportion of children in YAH has doubled from 0.6% since 1994, although these numbers are also small and have remained stable since 1999. Skip generation households increased significantly from 1988 to 1999 and have also remained stable thereafter at around 4.0%. A sizeable proportion of children (nearly 6%) lived in households with chronically ill adults by 2006 (not shown), and this figure is likely to increase in the next years (Zagheni, 2010).

**Table 2- Percentage of Children in Living Arrangements 1988-2006**

Household Type	1988 % (95% CI)	1994 % (95% CI)	1999 % (95% CI)	2006 % (95% CI)
<i>CHH</i>	0.3 (0.2-0.4)	0.5 (0.4-0.6)	0.6 (0.5-0.7)	0.7 (0.6-0.8)
<i>YAH</i>	---	0.6 (0.4-0.7)	1.1 (0.9-1.3)	1.2 (1.0-1.4)
<i>Skip Generation</i>	1.8 (1.6-2.0)	2.2 (2.0-2.4)	3.8 (3.6-4.2)	4.0 (3.7-4.3)
<i>Adult-Headed</i>	---	96.8 (96.5-97.0)	94.4 (94.0-94.8)	94.1 (93.9-94.6)

Source: Own calculations based on DHS data

Table 3 shows the proportion of children in living arrangements by poverty level in 2006. Of the living arrangements considered as vulnerable, children living in CHH, Skip generation households and households with sick members are notably poorer than those in households headed healthy, working-age adults. Surprisingly, members of YAH seem to have better material living conditions than those living in AHH.

**Table 3- Percentage of Children in Living Arrangements by SES- 2006**

	Children Headed Households (CHH) % (95% CI)	Young Adult Households (YAH) % (95% CI)	Skip Generation % (95% CI)	Households with Sick Members % (95% CI)	Adult Headed Households (AHH) % (95% CI)
<i>Not Poor</i>	43.9 (35-52)	73.9 (69-79)	44.8 (41-49)	45.0 (41-48)	56.3 (56-57)
<i>Poor</i>	56.1 (48-64)	26.1 (20-31)	55.2 (51-59)	55.0 (52-58)	43.7 (43-44)
<i>Total</i>	100.0	100.0	100.0	100.0	100.0

Source: Own calculations based on DHS data

In line with the findings of Meintjes et al (2010), table 4 shows that a surprisingly high proportion of children living in CHH and YAH report having both parents alive, 65% and 54% respectively. Moreover, the proportion of CHH and YAH actually headed by orphans is even smaller, by 2006 only 15% of this type of households were run by orphans (not shown). This means that in many

cases orphans and non-orphans share a common household and that in this cases the former are less likely to be the head.

Another result that contradicts the established idea about CHH, is the small proportion of double orphans living in them, less than 10%. This could be a result of data collection problems, one of the explanations we found is that orphaned children in CHH and YAH might tend to report having living parents for fear of being dispossessed or separated from their siblings. On the other hand, it might be the case that a significant proportion of CHH and YAH are in fact established for reasons other than parental death. The highest proportions of double orphans are found in YAH (19%) and skip generation households (24.4%).

**Table 4-Percentage of Children in Selected Living Arrangements by Orphan Status – 2006**

Orphan Status	Children Headed Households (CHH) % (95% CI)	Young Adult Households (YAH) % (95% CI)	Skip Generation % (95% CI)	Households with Sick Members % (95% CI)	Adult Headed Households (AHH) % (95% CI)
<i>Both parents alive</i>	65.3 (57.1-73.5)	54.2 (46.3-62.0)	42.0 (38.2-45.7)	70.6 (67.7-73.5)	79.1 (78.4-79.8)
<i>Maternal Orphans</i>	6.8 (2.6-10.9)	9.8 (5.8-13.7)	10.6 (8.5-12.7)	5.6 (4.2-7.0)	3.1 (2.8-3.4)
<i>Paternal Orphans</i>	19.9 (12.8-27)	17.0 (11.5-22.5)	23.1 (20.0-26.1)	19.3 (16.7-21.8)	12.8 (12.2-13.4)
<i>Double Orphans</i>	8.0 (3.4-12.5)	19.0 (11.2-26.8)	24.4 (21.0-27.8)	4.5 (3.3-5.7)	5.0 (4.6-5.3)
<i>Total</i>	100.0	100.0	100.0	100.0	100.0

Source: Own calculations based on DHS data

Children as young as 13 years are reported as head of households although the majority (44%) of heads in CHH are 17 years old (not shown). In general, members of CHH and YAH are older than children living in households with adults: 80% of children in CHH are between 10 and 17 years old.

In terms of their size, both CHH and YAH have a higher proportion of households made up of one child only (14.9 and 26.0 respectively) than households with adults, as shown in table 5. As observed by Kuhanen et al (2008), in a large number of cases only a portion of all siblings stayed at their parent's house to establish a CHH, while the rest (especially the younger ones) are taken in by members of the extended family. However, in the case of CHH the proportion of households with more than five children is relatively high (more than 25%).

**Table 5- Number of Children in Living Arrangements 2005/6**

	Children Headed Households (CHH) % (95% CI)	Young Adult Households (YAH) % (95% CI)	Skip Generation % (95% CI)	Households with Sick Members % (95% CI)	Adult Headed Households (AHH) % (95% CI)
<b>1</b>	14.9 (8.4-21.2)	27.8 (20.7-34.8)	15.3 (12.7-17.9)	5.7 (4.4-7.2)	7.9 (7.4-8.3)
<b>2 to 4</b>	58.7 (50.4-67.0)	58.4 (51.4-65.4)	70.5 (67.2-74.7)	57.5 (54.5-60.5)	60.7 (59.8-61.4)
<b>&gt;5</b>	26.4 (19.3-33.4)	13.9 (9.8-18.0)	14.2 (11.7-16.6)	36.8 (33.9-39.7)	31.5 (30.7-32.2)
<b>Total</b>	100.0	100.0	100.0	100.0	100.0

Source: Own calculations based on DHS data

### Multivariate Analysis

Table 6 presents the odds ratios for unmet basic needs coverage. Living in households with no adults (CHH and YAH) reduces the odds of having unmet basic needs<sup>3</sup> by 36% in comparison with children living in households headed by working-age adults (OR = 0.64;  $p < 0.05$ ). Although unexpected, these results are in line with observations by Ritcher and Desmond (2008), who note that children in CHH are less likely to experience occasional hunger than are children in households with adults.

On the other hand, children living in skip generation households and those with sick members are significantly disadvantaged in comparison with children living in households with healthy adults. The odds of having at least one unmet basic need are 64% higher for children living in a skip generation household and more than two times higher for children living in households with sick adults (OR=2.18;  $p < 0.01$ ).

The effects of the different types of living arrangements are significant even after controlling for orphan status, SES and age. The effect size of the coefficients does not change much either, with the exception of skip generation households that show a smaller gap in relation to the reference category after the controls are included.

As expected, the odds of having unmet basic needs are higher for poor children in comparison with children in more advantaged households (OR=0.16;  $p < 0.01$  for richer households). Orphans also have increased odds of having unmet basic needs, 68% more than non-orphans. It may look rather unusual to use this category in the present analysis (given that we also use categories such as “children headed households” in the living arrangement variable) but, as written above, many children living in CHH have both parents alive, allowing for sufficient numbers in the contingency tabulations for all crossings of the categories involved. Finally, age is also a relevant predictor of basic needs satisfaction. Younger children have increased odds of lacking basic material resources, although the difference between the two younger groups is not statistically significant.

<sup>3</sup> Not having a blanket or a pair of shoes or two sets of clothes.

**Table 6-Unmet basic Needs Odds Ratios - Zimbabwe 2005/6**

Variable	Sample size	<i>Unmet Basic Needs (5-17)</i>			<i>Unmet Basic Needs (5-17)</i>		
		Odds Ratio		Robust Std. E	Odds Ratio		Robust Std. E
<b>Sample size: 15077</b>							
<b>Living Arrangements</b>							
<i>Adult-Headed Households (Ref)</i>	13,018						
CHH & YAH	353	0.63	*	0.122	0.64	*	0.133
Skip Generation Households	769	2.56	**	0.301	1.64	**	0.209
Sick Adult Households	937	2.34	**	0.266	2.18	**	0.273
<b>Orphan Status</b>							
<i>Both Parents Alive (Ref)</i>	10,657						
Orphans	4,420				1.68	**	0.098
<b>SES</b>							
<i>Poor (ref)</i>	7,024						
Middle	3,330				0.47	**	0.033
Rich	4,723				0.16	**	0.019
<b>Age</b>							
<i>5 to 9 (ref)</i>	6,255						
10 to 14	6,170				0.95		0.037
15 to 17	2,652				0.59	**	0.034
<b>Place of Residence</b>							
<i>Rural (ref)</i>	11,534						
Urban	3,543				0.34	**	0.050

\*\* significant at 1%

\* significant at 5%

As mentioned above, qualitative evidence has been presented in support of the hypothesis that two utterly different situations might be included under the CHH and YAH classifications: households formed as a consequence of a crisis (parental death or severe illness) and “planned” or “functional” households (established to facilitate access to schools, specially in rural areas) (Ruiz-Casares 2009). According to this account, “functional” CHH are composed by children or young adults that have both parents alive and live in a separate household for reasons other than economic hardship or family crisis. These households would not necessarily be vulnerable as they probably count on the protection and support from parents, even when they are not official members of the household. The second, less functional type corresponds to the prevailing idea about CHH, composed by orphans who might or might not receive supervision and support from relatives, members of the community, or formal organizations.

In order to test this hypothesis we conducted separate analyzes for orphans and non-orphans living in rural areas, comparing Child Headed Households against Adult Headed Households in terms of their effect over the probability of having unmet basic needs. We expect to find no

difference after isolating children in more “functional” situations (non-orphans in rural areas). It is worth noting that we are not considering whether the household is *headed* by an orphan or not but the (orphan) status of the children living in the household. As mentioned before, many CHH are composed of orphans and non-orphans and are predominantly headed by the latter.

Table 7 shows that living in CHH & YAH reduce the odds of having unmet basic needs for both groups. This supports the idea that living in CHH & YAH has a protective effect that cannot be attributed exclusively to the presence of “functional” households among CHH and YAH. In fact, effect appears stronger among orphans, which again suggest the presence of a significant amount of support from the extended family and the community to the CHH and YAH or selection issues associated to the establishment of this type of households.

**Table 7- Basic Needs Odds Ratios- Orphans vs. Not orphans in rural areas- Zimbabwe 2005/6**

Variable	Sample size	<i>Orphans</i>			<i>Non-Orphans</i>		
		Odds Ratio		Std. E	Sample size	Odds Ratio	Std. E
	<b>2900</b>				<b>7157</b>		
<b>Living Arrangements</b>							
<i>Adult-Headed Households (Ref)</i>	2,786				7013		
CHH & YAH	114	0.59	**	0.120	144	0.67	* 0.126
<b>Age</b>							
<i>5 to 9 (ref)</i>	914				3289		
10 to 14	1368	0.82	*	0.073	2787	1.03	0.056
15 to 17	618	0.49	**	0.054	1081	0.64	** 0.049
<b>SES</b>							
<i>Poor (ref)</i>	1702				4343		
Middle	928	0.54	**	0.045	1934	0.43	** 0.025
Rich	270	0.18	**	0.028	880	0.15	** 0.015

\*\* significant at 1% \* significant at 5%

## Discussion and Conclusions

This study finds that a significant number of CHH and YAH are not a consequence of parental death, and this is consistent with others in sub-Saharan Africa (see Meintjes et al, 2010; Ruiz-Casares 2009). Also, we find that in spite of allegedly rapid increases in the number of orphans, the proportion of CHH and YAH has remained relatively stable since 1999. Hence, the link between the growing number of orphans and the increase in CHH and YAH is, at the very least, ambiguous.

Our results also suggest that children living in CHH and YAH have more chances of having their basic needs satisfied than children living with healthy adults. Skip generation households and those with sick members proved to be distinctly more vulnerable living arrangements. However,

there is the need to exercise caution in the interpretation of our findings. Next, we discuss some alternative scenarios that could help understand some of the results presented in this paper.

Selection issues might partially explain why children living in CHH and YAH have less chances of having unmet basic needs. Given the strains experienced by the extended family, the community may tolerate the establishment of a household headed by children in those cases where the household already had a relatively solid position. Thus, only children that are better prepared to fend for themselves would be allowed to continue without the direct supervision of adults. It could also be the case that very unsuccessful households headed by young individuals are very short-lived and thus less likely to be observed during a survey, preventing us from assessing their negative effect. Another possibility is that the most vulnerable children in those households have died, again preventing us from revealing how bad their condition was in comparison with that of other children. Sample selection models (Heckman, 1979) predicting and assessing the effect of this living arrangement on its own survival and on that of its members could help us bringing this issue to a close. But only longitudinal data would allow the establishment of such models. In the meantime, it could be useful to use the DHS data to assess whether child survival before age 5 is influenced by the same predictors that influence the outcome measure in this study, i.e., unmet basic needs.

Other, more substantive factors could also account for our results. In this respect, the influence of formal and informal support networks should not be underestimated. As has been observed in the past (Foster, 1997; Kuhanen, 2008; Ayieko, 1997), CHH are not always left alone without the supervision of relatives and adults from the community, who might not live in the household but certainly help support it. In this regard, the findings from our study contribute to the more optimistic previsions about the capacity of the extended family to mitigate the negative effects of the AIDS epidemic on vulnerable children. Yet, “external” sources of support (government plans, CSO campaigns), that might or might not be channeled through the extended family, could play a key role in maintaining some of the children’s basic needs covered.

The specific targeting of CHH by social programs has been questioned before, both on the grounds of low prevalence (Hosegood, 2007; Meintjes et al, 2010) and of a relatively low vulnerability (Ritcher and Desmond, 2008). Although these accounts underestimate the role of external support in explaining the relatively low prevalence and vulnerability of CHH, they make an important point by underscoring the risks of leaving other similarly vulnerable (though apparently less dramatic) situations unattended. In fact, if our results point to the effectiveness of community efforts to protect children in CHH and YAH, they also highlight the risks faced by children in other types of living arrangements (skip generation, households with sick members). It seems clear that the presence of adults does not guarantee the well being of children, especially when these adults are limited in their capacity to provide for children.

In sum, it appears that the situation of children living in CHH and YAH is more complex than it has been usually assumed. However, the evidence presented here should not be seen as a rationale for abandoning social programs and aid schemes targeted at CHH and YAH. It rather highlights the need to sustain and expand these efforts to also protect other vulnerable children and to collect more (and more exhaustive) information that would help us having a clearer picture of the vulnerabilities and risk faced by children in communities affected by HIV/AIDS.

## Acknowledgements

We wish to thank Simona Bignami for her comments and suggestions on a previous version of this paper. This paper benefited from the support of the Social Sciences and Humanities Research Council of Canada.

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