



# Orphans of the AIDS epidemic? The extent, nature and circumstances of child-headed households in South Africa

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There is widespread concern that the number of children living in "child-headed households" is rapidly increasing as a result of AIDS-related adult mortality in much of sub-Saharan Africa. Based on analyses of data from several representative national surveys over the period 2000–2007, this paper examines the extent to which this is the case in South Africa. It explores trends in the number of children living in child-only households and characterises these children relative to children living in households with adults (mixed-generation households). The findings indicate that the proportion of child-only households is relatively small (0.47% in 2006) and does not appear to be increasing. In addition, the vast majority (92.1%) of children resident in child-only households have a living parent. The findings raise critical questions about the circumstances leading to the formation of child-only households and highlight that they cannot for the main part be ascribed to HIV orphaning. Nonetheless, the number of children living in this household form is not insignificant, and their circumstances, when compared with children in mixed-generation households, indicate a range of challenges, including greater economic vulnerability and inadequate service access. We argue that a solitary focus on the HIV epidemic and its related orphaning as the cause of child-only households masks other important issues for consideration in addressing their needs, and risks the development of inappropriate policies, programmes and interventions.

**Keywords:** orphan; HIV; AIDS; children; South Africa; child-headed household; child-only household; policy

### Introduction

Child-headed households have been observed in parts of Africa which have been badly affected by AIDS. They are a new thing in those areas. The main cause of this change is the large number of young adults dying from AIDS. (International HIV/AIDS Alliance & Family Health International, 2008)

There is widespread concern that the number of children living without adults in so-called "childheaded households" is rapidly increasing as a result of AIDS-related adult mortality in South Africa and elsewhere in sub-Saharan Africa. The Actuarial Society of South Africa estimates that a total of 4.1 million children in South Africa had lost one or both parents in mid-2007. Eighteen percent of those without mothers had lost them to AIDS. Orphan numbers are predicted to rise sharply until 2011 (Actuarial Society of South Africa, 2006), raising critical questions about the nation's capacity to provide sufficient family-based care for these children.

Many argue that kinship networks are stretched to their limits and are struggling to provide support to orphaned children (Department of Social Development, 2005; Foster, 2000; Germann, 2006; Gow & Desmond, 2002; Howard et al., 2006; Nyambedha, Wandibba, & Aagaard-Hansen, 2003; Republic of South Africa, 2006a; UNICEF, 2006). Popular images of large numbers of young orphans thrust into premature parenting of their siblings and left to fend for themselves are pervasive (Meintjes & Giese, 2006), and are perpetuated by the reporting of the South African media, among others (Meintjes & Bray, 2005; Meintjes & Giese, 2006).

Substantial South African government attention to addressing the HIV epidemic is directed at child-headed households. For example, the country's recently promulgated Children's Act, the primary piece of protective legislation for children, made local legal history by instituting special provisions for children living in child-headed households (Republic of South Africa, 2006b). In addition, the HIV & AIDS and STI National Strategic Plan 2007–2011 (the overarching AIDS policy for the country) as well as the Policy Framework for orphans and other children made vulnerable by HIV and AIDS single out child-headed households as a priority category of

children requiring intervention (Department of Health, 2007; Department of Social Development, 2005). Government departments that in practice carry little responsibility for the HIV epidemic have also been observed to consider child-headed households as central concerns of their AIDS response (Department of Education, 2006; Department of Housing, 2003, 2006).

In spite of this focus, little is known about the extent, nature and circumstances of child-headed households in South Africa. Only a handful of small localised qualitative studies have been conducted in the country (see Donald & Clacherty, 2005; Naicker & Tshenase, 2004; Nelson Mandela Children's Fund, 2001; Strode, 2003), augmented by a limited number of qualitative studies from elsewhere in Africa (Ayieko, 1998; Foster, Makufa, Drew, & Kralovec, 1997; Germann, 2006; Luzze, 2002; Roby & Cochran, 2007; Walker, 2002). Various analyses of survey data from South Africa and further afield make brief reference to the prevalence of child-headed households as part of larger analyses (Brookes, Shisana, & Richter, 2004; Gilborn, Nyonyintono, Kabumbuli, & Jagwe-Wadda, 2001; Hill, Hosegood, & Newell, 2008; Hosegood et al., 2007; Madhavan & Schatz, 2005; Meintjes & Giese, 2006; Monasch & Boerma, 2004; Urassa et al., 2001). However, systematic quantitative analyses that begin to provide a national picture of the situation - including over time are strikingly absent, save for one recent exception (see Richter & Desmond, 2008). In contrast to assumptions of rising numbers underlying most of the focussed qualitative studies on child-headed households, all the above quantitative analyses indicate that child-headed households are relatively rare (<1% of all households).

This analysis aims to address gaps in knowledge by exploring trends in the number of children living in child-headed households in South Africa, as well as characterising these children relative to children living in households with adults.

### Methods

## **Definitions**

Statistics South Africa, the agency responsible for both surveys used in this analysis, defines a household as consisting of people who have stayed in a common dwelling for an average of at least four nights a week in the month preceding the survey.

In this analysis, the term "child-only" is used to denote households in which all members were under 18 years at the time of the survey (commonly referred

to in the literature and in popular discourse as "childheaded" households). The term "mixed-generation" is used to denote households that include both child and adult members.

Orphans are defined in three mutually exclusive categories: maternal orphans (mother deceased or vital status unknown, father alive); paternal orphans (father deceased or vital status unknown, mother alive) and double orphans (both parents deceased or vital status unknown). We refer to children with both biological parents alive as non-orphans.

### Data sources

The analysis of trends in the prevalence of child-only households draws on the annual General Household Survey (GHS) for the years 2002-2006 and the biannual Labour Force Survey (LFS) for the years 2000–2007. These are the only representative national surveys which provide appropriate data over time at sufficient frequencies, and are adequately standardised to provide comparability between iterations (Barnes et al., 2007). Both surveys are based on twostage sampling procedures, with the selection of 3000 clusters and 10 households per cluster, stratified by the 53 districts in the country (Statistics South Africa, 2008a, 2008b). All available survey data from 2000 to 2007 were included from both surveys, with a total of 21 analyses.

The more detailed demographic analyses and comparisons of child-only and mixed-generation households draw specifically on the 2006 GHS.

# Data processing and analysis

In each of the surveys used in this analysis, a small proportion of enumerated household members did not have an age recorded (<0.1%). In households with no recorded adult members but a member of unknown age, the household was considered mixedgeneration if the relationship between any children and the head of household was that of grandchild, or in the case of children aged seven years or older, child. Such households were also considered mixedgeneration if any member had completed schooling up to Grade 12, or received a state old age pension, or disability grant (available only to adults over 18 years). Remaining households with no adult members but a member of unknown age were coded as "undefined" but were included with the category of child-only household in sensitivity analysis. The sensitivity analysis indicated that the exclusion of undefined households had a negligible effect on the estimated proportions of children in child-only households.

Table 1. Distribution of individuals and households in child-only, mixed-generation and adult-only households in South Africa, 2006.

		Individuals		Households			
Household type	Percentage (%)	95% CI	Illustrative #	Percentage (%)	95% CI	Illustrative #	
Child-only Mixed-generation	0.26 79.79	(0.20–0.32) (78.65–80.93)	122,241 37,813,524	0.47 58.32	(0.35–0.58) (56.78–59.85)	60,410 7,564,939	
Adult-only Total	19.95 100.00	(18.80–21.10)	9,455,265 47,391,030	41.22 100.00	(39.66–42.78)	5,346,402 12,971,751	

Note: Own calculations based on General Household Survey 2006. CI - confidence interval; # - number.

The proportion of children in child-only households was calculated nationally for each iteration of both the GHS and LFS, and additionally by province for the five consecutive years of the GHS. Illustrative numbers of children or households were derived from these proportions by applying them to the national population in the given year. The weights are derived from mid-year population estimates, which are themselves subject to error. Population numbers should therefore be regarded with some caution.

The analysis was conducted predominantly at the individual level (i.e., proportion of children, rather than of households). This helped to avoid the confounding effect of a household denominator that has changed faster than population growth over the analysis period – due in part to the large-scale roll-out of housing in South Africa. Household-level comparisons distinguished between child-only households and mixed-generation households. Households without children (41%) were excluded from selected analyses.

The orphan status of children was described for each household type based on responses to survey questions about the vital status of each parent. The relationship between orphanhood and child-only households was explored in univariate logistic regression in the 2006 GHS survey.

Individual and household characteristics including age, gender, race, schooling, poverty, household size and employment were described using appropriate summary statistics (proportions with 95% confidence intervals [CI] and medians with interquartile [IQR] ranges). All estimates used the provided survey probability weights with the standard errors adjusted for design effect resulting from the cluster survey designs.

Proportions were compared using Pearson chisquared tests corrected for survey design and the continuous measures (age and household size) with Wilcoxon rank-sum tests. All tests of significance were two-sided. Analyses were done using Stata<sup>TM</sup> (StataCorp, 2007).

#### Results

# Proportion and number of children living in child-only households

In the 2006 GHS, 0.26% (CI: 0.20–0.32%) of South African residents were living in child-only households, equivalent to an estimated 122,000 children living in 60,000 households. This represents 0.67% (CI: 0.51–0.83%) of children in South Africa. Due to differences in household density and the age of residents, the proportion of households which were child-only households in the same year was higher at 0.47% (CI: 0.35–0.58%) (Table 1).

There was no discernible increase or decrease in the proportion of children living in child-only households between 2000 and 2007 in the GHS and LFS (Figure 1), remaining between 0.55 and 0.85% of all children throughout this period.

Comparing this metric across the nine provinces of South Africa (Figure 2 and Table 2), the absence of a clear trend was confirmed. Provincial analysis in addition indicates substantial regional differences in proportions of child-only households. Across the five-year period, the vast majority (88% in 2006) of child-only households were recorded in three of the

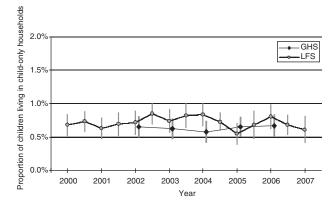


Figure 1. Proportion of children living in child-only households, 2000–2007. Note: Own calculations based on the General Household Survey (GHS) 2002–2006 and Labour Force Survey (LFS) 2000–2007.

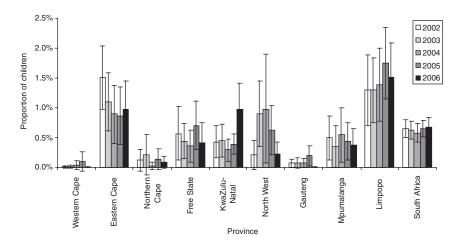


Figure 2. Proportion of children living in child-only households by South African Province, 2002–2006. Note: Own calculations based on the General Household Survey 2002–2006.

nine provinces: Limpopo, KwaZulu-Natal and the Eastern Cape.

### **Orphanhood**

According to the GHS, 20.5% (CI: 19.4–21.6%) of children in South Africa were orphans in 2006. This equates to 3.7 million children, of whom 600,000 were maternal orphans, 2.48 million were paternal orphans and 660,000 were double orphans.

There was a substantial increase in the number of orphans over the period under analysis: there were 760,000 more orphaned children in South Africa in 2006 than in 2002, which equates to an increase since 2002 of four percentage points in the total orphan population as a proportion of all children in South Africa (2002: 16.4%, CI: 15.8–17.1%; 2006: 20.5%, CI: 19.4–21.6%, Table 3). In particular, the data illustrate notable increases in the number and proportion of double orphans over the five-year period:

the number of children who have lost both a mother and a father increased from 360,000 to 660,000 – an increase of nearly two percentage points in double orphans as a proportion of all children (2002: 2.0%, CI: 1.9–2.2%; 2006: 3.6%, CI: 3.3–4.0%).

In spite of these increases in the number of orphans, the majority (92.1%) of children living in child-only households in 2006 had a living parent (Table 4): 7.9% had lost both parents, 11.5% a mother only and 18.5% only a father. This distribution did not change between 2002 and 2006. In 2006, 62.1% of children in child-only households had both parents living (CI: 51.2–73.1%), a similar proportion to 2002, when 64.8% (CI: 54.1–75.4%) of children in child-only households were not orphans of any kind.

Compared to mixed-generation households, however, the odds of being an orphan increased for children living in child-only households (OR: 2.4; CI: 1.5–3.8%). Nonetheless the vast majority of orphans

Table 2. Proportion and number of children in child-only households in South Africa, 2006.

Province	Children (%) <sup>a</sup>	95% CI	Illustrative # children	National share of children in COHs (%)
Western Cape	< 0.01	(0.00-0.01)	43	0
Eastern Cape	0.98	(0.53-1.44)	31,328	26
Northern Cape	0.09	$(0.00-0.19)^{b}$	306	0
Free State	0.41	(0.07-0.75)	4577	4
KwaZulu-Natal	0.97	(0.53-1.41)	37,079	30
North West	0.24	(0.05-0.42)	3393	3
Gauteng	0.00	(0.00-0.01)	119	0
Mpumalanga	0.38	(0.10-0.66)	5318	4
Limpopo	1.51	(0.93-2.09)	40,078	33
South Africa	0.67	(0.51-0.83)	122,241	100

Note: Own calculations based on General Household Survey 2006. COH – child-only household; CI – confidence interval; # – number. 
<sup>a</sup>Percentage of all children living in child-only households. 
<sup>b</sup>Normal approximation of binomial confidence interval resulted in a reported lower CI below 0 which was rounded up to 0.

Table 3. Orphan status of children in South Africa, 2006 and 2002.

		2006		2002			
Orphan status	Children (%)	95% CI	Illustrative 95% CI # children		95% CI	Illustrative # children	
Non-orphan	79.5	(78.4–80.6)	14,475,492	83.6	(82.9–84.2)	15,117,379	
Maternal orphan	3.3	(3.0-3.6)	596,837	2.7	(2.5-3.0)	491,736	
Paternal only	13.6	(12.8-14.4)	2,475,355	11.7	(11.2-12.3)	2,124,756	
Double orphan	3.6	(3.3-4.0)	660,270	2.0	(1.8-2.2)	356,892	
(Unspecified)			35,257			12,855	
Total			18,243,211			18,103,618	

Note: Own calculations based on General Household Survey 2006. CI - confidence interval; # - number.

were resident in mixed-generation households: 1.2% (CI: 0.8–1.7%) of all orphans lived in child-only households in 2006.

### Other characteristics of children by household type

Boys and girls were evenly distributed in both household types (Table 5).

Child-only households were however found to be smaller than mixed-generation households, with a median of two residents compared to five in mixed-generation households (p < 0.001, Table 6). A large proportion of child-only households (43.6%) consisted only of one member. Two-thirds of these single-person households were boys, and 84% were children aged 15 or over.

The age distribution of children in mixed-generation households (Figure 3) was fairly evenly spread across the 0–17 age range, with a median age of nine years (IQR 5–13) and only 27.6% being teenagers of 13 years and above. By contrast, children living in child-only households were disproportionately older. The median age in child-only households was 15 years (IQR 11–16), with the majority being teenagers (64.3%).

The oldest children in child-only households were typically older than the oldest children in mixed-generation households (median 16 vs. 13, p < 0.001,

Table 5). There were few child-only households where all children were very young: in 88.3% of child-only households in 2006, the oldest child was aged between 15 and 17 years (CI: 82.1–94.5%).

Children living in child-only households were more likely to be black Africans than those in mixed-generation households (97.4% vs. 84.2%, p < 0.001). They were also more likely to be living in poverty, with monthly household expenditure below R400 (46.9% vs. 15.1%, p < 0.001, Table 5). The major source of income in child-only households was remittances (77.4%) compared to mixed-generation households in which salaries (54.1%) and social grants (29.6%) – including state old age pensions – comprised the major sources of income (Table 5). There was a small absolute difference in the proportion of working-age (>15 years) children who were economically active (6.0% in child-only vs. 1.2% in mixed-generation households, p < 0.001).

No difference was found in school attendance for children aged 7–17 (94.6% in child-only vs. 96.0% in mixed-generation, p = 0.26).

In 2006, South Africa's social security system entitled "primary caregivers" of poor children under the age of 14 years to receive a Child Support Grant valued at R190 per month, considered equivalent to US\$22 (African Development Bank Group, 2007).

Table 4. Orphan status of children living in mixed-generation and child-only households in South Africa, 2006.

	Mixed-g	eneration house	eholds <sup>a</sup>	Child-only households <sup>a</sup>			
	Children (%)	95% CI	Illustrative # children	Children (%)	95% CI	Illustrative # children	
Non-orphans	79.6	(78.5–80.7)	14,399,555	62.1	(51.2–73.1)	75,937	
Maternal orphans	3.2	(2.9-3.5)	582,776	11.5	(4.6-18.4)	14,061	
Paternal orphans	13.6	(12.7-14.4)	2,452,761	18.5	(10.4-26.5)	22,594	
Double orphans	3.6	(3.2-4.0)	650,621	7.9	(1.7-14.1)	9649	
Total	100.0		18,085,713	100.0		122,241	

Note: Own calculations based on General Household Survey 2006. CI - confidence interval; # - number.

<sup>&</sup>lt;sup>a</sup>Chi-square p < 0.001 comparing the distribution of orphan status between household forms.

Table 5. Demographic characteristics of mixed-generation and child-only households in South Africa, 2006.

	Mixed-generation households				Child-only households		
	Percentage $(\%)^a$	95% CI <sup>a</sup>	Illustrative #	<i>p</i> -value <sup>b</sup>	Percentage (%) <sup>a</sup>	95% CI <sup>a</sup>	Illustrative #
Age distribution of children <sup>c</sup>				< 0.001			
Children in 0–6 age group	39.5	(38.6-40.4)	7,160,184		7.9	(4.5-11.2)	9620
Children in 7-13 age group	38.4	(37.6-39.1)	6,949,417		37.1	(31.0-43.2)	45,294
Children in 14-17 group	22.1	(21.5-22.7)	4,007,642		55.1	(48.1-62.1)	67,327
All children	100.0		18,117,243		100.0		122,241
Median (IQR)	9	(5–13)		$< 0.001^{d}$	15	(11-16)	
Oldest child				< 0.001 <sup>d</sup>			
Median age (IQR)	13	(9–16)			16	(15-17)	
Oldest child is 15+ years	38.4	(36.8–39.9)			88.3	(82.1–94.5)	
Gender <sup>c</sup>				0.90			
Male	50.2	(48.5–52.0)	9,097,234		47.6	(37.2-58.0)	60,184
Female	49.8	(48.0–51.5)	9,014,999		52.4	(42.0–62.8)	65,286
Race <sup>c</sup>				0.003			
African	84.2	(81.9–86.4)	15,245,877		97.4	(93.7–101.1)	118,572
Income poverty (monthly HH e	expenditure)						
< R400/month	15.1	(14.0-16.1)		< 0.001	46.9	(35.5-58.2)	
< R1200/month	67.5	(65.2–69.9)		< 0.001	88.9	(80.9–97.0)	
Main income source				< 0.001			
Wages	54.1	(51.4-56.7)			7.8	(3.1-12.4)	
Remittances	10.7	(9.8-11.6)			77.4	(68.3 - 86.4)	
Grants	29.6	(27.4-31.8)			6.8	(0.6-13.1)	
Other	4.5	(4.0-5.0)			4.4	$(0.0-9.0)^{\rm e}$	
None	1.2	(0.9-1.5)			3.6	$(0.0-7.8)^{\rm e}$	
Access to child support grant <sup>c</sup>				0.013			
Uptake: children <14 years	45.8	(43.9–47.7)	6,451,380		28.6	(16.1-41.1)	15,700
School attendance <sup>c</sup>				0.260			
School-age attending (%)	96.0	(95.5–96.4)	10,500,000		94.6	(91.8–97.4)	106,494
Employment in the household							
Someone working	62.9	(60.5–65.3)	4,757,930	< 0.001	5.9	(2.0-9.9)	3591
Child >15 years working <sup>c</sup>	1.2	(0.8-1.6)		< 0.001	6.0	(2.0-10.0)	

Note: Own calculations based on General Household Survey 2006. CI - confidence interval; HH - household; # - number; IQR - interquartile

While 90.7% of mixed-generation households included at least one child under 14 years, only 53.2% of child-only households had a child in the eligible age group. Eligible children in child-only households were in turn less likely to be receiving the grant (28.6% vs. 45.8%, p = 0.013).

Children living in child-only households had substantially lower levels of access to basic municipal services such as piped water, electricity or adequate sanitation than those in mixed-generation households. They were also more likely to be living outside of major metropolitan areas or in "traditional" dwellings (Table 6).

## Discussion

Contrary to predictions - and notwithstanding the extent of the HIV epidemic in the country - the study

<sup>&</sup>lt;sup>a</sup>Unless otherwise stated.

<sup>&</sup>lt;sup>b</sup>Chi-square test accounting for survey design, unless otherwise stated.

<sup>&</sup>lt;sup>c</sup>Individual level analysis. All other analyses are at household level.

<sup>&</sup>lt;sup>d</sup>Wilcoxon rank-sum test, unweighted.

<sup>&</sup>lt;sup>e</sup>Normal approximation of binomial confidence interval resulted in a reported lower CI below 0 which was rounded up to 0.

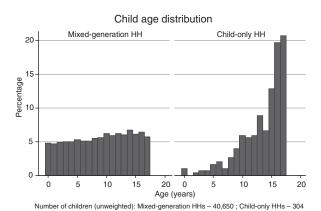
Table 6. Housing characteristics of mixed-generation and child-only households in South Africa, 2006.

	Mixed-generation households				Child-only households		
		95% CI	Illustrative #	<i>p</i> -value <sup>a</sup>		95% CI	Illustrative #
Household size				< 0.001 <sup>b</sup>			
Median # HH members	5				2		
Interquartile range	4–6				1-3		
Prop. with 1 HH member	_				43.6	(32.8–54.5)	
Housing type				0.014			
Formal dwelling	69.7%	(66.9-72.5)	5,241,305		55.2%	(45.2-65.1)	32,052
Informal dwelling	16.6%	(14.7-18.4)	1,246,122		20.4%	(9.3-31.5)	11,879
Traditional dwelling	13.7%	(10.6–16.8)	1,031,840		24.4%	(15.2–33.6)	14,163
Area type				0.029			
Metro (six main cities)	32.5%	(28.7 - 35.7)	2,433,212		14.3%	(2.0-26.6)	8614
Non-metro	67.5%	(64.3–71.3)	5,131,416		85.7%	(73.4–98.0)	51,796
Municipal services							
Adequate sanitation	60.5%	(57.2–63.9)	4,580,100	< 0.001	33.1%	(24.3-41.9)	20,005
Water on site	65.5%	(61.5–68.8)	4,929,210	< 0.001	37.7%	(27.8-47.6)	22,773
Electricity mains	80.5%	(77.5–82.4)	6,030,823	0.010	69.5%	(60.2–78.7)	40,681

Note: Own calculations based on General Household Survey 2006. CI – confidence interval; HH – household; # – number; Prop – proportion.

findings fail to provide evidence that child-only households are a rapidly growing phenomenon in South Africa. Although it has been argued that there have been significant increases (Richter & Desmond, 2008), this is not evident over the period from 2000 to 2007, despite substantial increases in orphan numbers - in particular double orphans during this time. This finding is in line with that of demographic surveillance site-based analyses from South Africa (Madhavan & Schatz, 2007) and elsewhere (Hosegood et al., 2007). The increase in numbers of child-only households noted by Richter and Desmond was largely in the period prior to this analysis (1995–2002). If this increase were primarily HIV-related, one would expect it to be sustained. Considering the mounting burden of care placed on family and community by the HIV epidemic, there may yet be a discernible increase in children living without adults in the future. However, the small proportion of children resident in child-only households in countries in Africa where the epidemic is more advanced suggests that numbers in South Africa are indeed unlikely to increase as forecast (Ainsworth, Ghosh, & Semali, 1995; Gilborn et al., 2001; Hosegood et al., 2007; Monasch & Boerma, 2004; Monk, 2000; Urassa et al., 2001).

The absence of a linear relationship between HIV, orphanhood and the child-only household form is further demonstrated by the finding that most



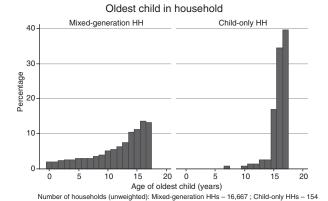


Figure 3. Age profile of children in mixed-generation and child-only households in South Africa, 2006. Note: Own calculations based on General Household Survey 2006.

<sup>&</sup>lt;sup>a</sup>Chi-square test accounting for survey design, unless otherwise stated.

<sup>&</sup>lt;sup>b</sup>Wilcoxon rank-sum test, unweighted.

children living in child-only households to date have at least one living parent (in eight out of 10 instances, a mother), and that there has been no increase in the proportion of orphans in child-only households during the period under analysis. This suggests that kinship networks continue to provide extensive care for children affected by HIV, as evidenced in other studies (Giese, Meintjes, Croke, & Chamberlain, 2003; Hill et al., 2008; Hosegood et al., 2007).

This is not to dismiss the idea that HIV has a role in the development of child-only households. Although there are many more non-orphans than orphans in child-only households, orphans face increased odds of finding themselves in such living arrangements. Rather, the findings suggest that the circumstances leading to the formation of child-only households in South Africa are more complex than is generally understood.

At present, the only available nationally representative data come in the form of cross-sectional surveys such as those included in this analysis. While it is possible to examine trends by comparing across the surveys, it is not possible to draw firm conclusions about either the formation or duration of child-only households. Anecdotal evidence provided by studies focussing on other issues documents instances of children living without adults in order to access education (White, Meintjes, & Mafokoane, 1998; Wilson, 2003), and as a result of parental labour migration (Abaqophi basOkhayeni Abaqinile, 2008; Hall, Leatt, & Rosa, forthcoming). Further research would be needed to understand the association between other social phenomena such as these and the establishment of child-only households.

While the GHS includes 105,000 individuals in 30,000 households, only 156 households with a total of 304 members were "child-only" in the 2006 survey. This limits the power of analysis of childonly household characteristics and results in wide confidence intervals. when exploring their frequency sub-nationally. The analysis is further subject to inherent limitations of household surveys which could bias our findings in either direction. The enumeration of household occupants relies on strict definitions which might have excluded some adults inappropriately. Likewise some children living without adults in settings not sampled by household surveys, or who do not have a fixed abode may not have been included.

It is nonetheless possible to draw some useful comparisons between children who live with adults and those in child-only households. Most child-only households do not consist of large groups of young children. Rather they tend to be single-child or small households, with the average age of children skewed

towards older teenagers: the overwhelming majority included at least one child aged between 15 and 17 years in 2006, and half of children living in these households were aged 15 years and above.

Child poverty is widespread in South Africa, but our comparative findings suggest that children in child-only households experience greater income poverty and have poorer service access relative to those living in all mixed-generation households. This could be confounded by the geographical distribution of these households, which we could not test due to the small number of child-only households. Importantly, other analyses have identified sub-categories of mixed-generation households - for example, households headed by single or young adults – that may be more economically vulnerable than child-only households (Richter & Desmond, 2008).

Three-quarters of child-only households rely on remittances as their main source of income – evidence which contrasts with notions of child-only households as vulnerable due to isolation or enforced selfsufficiency. However, the disproportionate reliance on remittances, combined with very low access to regular income through formal employment and social grants from the state, may indicate that childonly households in general have less reliable income than households with adult members.

Constituting less than 1% of all children in South Africa, those living in child-only households are indeed rare relative to children resident in other household forms. However totalling an estimated 122,000 in 2006, the number of children living in this extreme situation in South Africa is of concern. Certainly their circumstances predispose them to a range of challenges. Formal responses to child-only households on the part of both the state and civil society are therefore critical.

Yet a predominant focus on the HIV epidemic and its related orphaning as the cause of child-only households masks important issues. The findings of this study raise important considerations for related policy and interventions. They highlight the danger that HIV policy and programming focus disproportionately on children living in child-only households at the expense of much larger numbers of children whose lives are compromised in other ways (Hill et al., 2008; Meintjes & Giese, 2006). In addition, there is a risk that policies, programmes and interventions which conceive of child-only households primarily as groups of young orphans will fail to address many of the reasons underlying the existence of this household form, and provide inappropriate mechanisms of support or intervention. The existence of living parents in the majority of cases, combined with qualitative evidence about the temporary nature of many

child-only households (Madhavan & Schatz, 2007; Meintjes & Giese, 2006), suggests that it is inappropriate to conceive of child-headed households as permanent arrangements requiring intervention or dissolution. In the absence of an adequate evidence base or any longitudinal national data, more research is required in order to adequately understand the complex of factors which shape the formation, duration and form of child-only households, and to ensure that associated policy and programming is well-grounded and appropriate.

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