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Changes in household composition and family structure during the AIDS epidemic in Uganda

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Abstract

The paper examines aspects of changes in the family and household structure during the AIDS epidemic in Uganda using data collected from a multi-phase study in six districts. The majority of households were of extended nature and there were high levels, though declining, of orphanhood and widowhood. There was also increase in the dependency burden. Households headed by males and the elderly increased and a few were headed by children. Monogamous households with children were increasing.

The family is a fundamental unit of a society. This paper examines aspects of the family and household structure in the era of AIDS in Uganda. Sub-Saharan Africa is one of the regions in the world most affected by AIDS (Kalibala and Anderson 1994). McKinley (1996) observed that in some cities of Uganda, 12-15 per cent of adults were infected with HIV and overall, an estimated 1.2-1.5 million Ugandans were infected, and 150,000-200,000 died annually from AIDS.

Goncalves (1994) estimated that in Uganda one out of every six adults was HIV-positive; and that the high-risk group of males was aged 20-30 years, while that of the females consisted of single mothers aged 18-25 years. He pointed out the far-reaching consequences of the epidemic, including many orphans with no one to care for them or with ineffective carers.

Preble and Foumbi (1991) reported that AIDS in Africa affects entire families and communities more than any other disease. Heterosexually transmitted AIDS is critically influenced by changing African family patterns and structures. The family in Africa has traditionally been the major structure responsible for caring for the health of individuals, but the widespread AIDS-related morbidity and mortality have threatened African families in many areas.

In Uganda, as in many other African countries, the family has a hierarchy of relationships, privileges and duties together with an intense sense of solidarity. Family structures are either nuclear or extended. In the African family, four important roles are performed by the father, mother, child and the old. Traditionally the father is the head of the family. He is responsible for the well-being of the family and has to ensure the continuity of the lineage by begetting children. The mother is responsible for the upbringing of the children and caring for her husband and other family members. The child is greatly desired in the family and is regarded as a guarantee of the continuance of the family lineage. The child is cared for by the parents and contributes to the family by helping the parents with household and farm work. The grandparents are part of the extended family system, and are regarded as important in the upbringing of children.

Communities throughout most of Africa have mainly consisted of polygamous extended families united under dominant heads; in these families co-operation and reciprocation have been the norm.

Although in the past the extended family prospered, with modernization, there has been

an increasing tendency towards a nuclear family system.

In spite of changes in size, structure and function caused by the AIDS epidemic, the African family has persistently maintained its place as the central human social unit. Whether in the nuclear or the extended form, the family has remained a network of people most of whom are connected by kinship.

Mukiza-Gapere and Ntozi (1995) observed that in Uganda a new household structure has emerged where households are headed by widows, single women, children under 18 years of age and orphans. Widows headed households because the traditional practice of widow inheritance by brothers-in-law was disappearing for fear of contracting HIV. Also households are experiencing increased numbers of orphans whose care causes heavy burdens.

The AIDS epidemic has had adverse psychological and economic consequences leading to changes in the family structure (Ankrah 1993). This has disturbed the capacity of the nuclear and the extended family to respond to the needs of the members afflicted by HIV/AIDS. Because of the effects of the epidemic, the clan system has become the locus of AIDS activity as it is designed to ensure the well-being and continuity of the family. Its leadership undertakes to sustain, reorganize or create wholly new families among populations devastated by the epidemic.

Rutayuga (1992) predicted that AIDS would cause the deaths of 1.5-2.9 million women of reproductive age in Africa during the 1990s. This in turn would result in 3.1-5.5 million orphans forming 6-11 per cent of those below 15 years. Many of these orphans would be infants. The large numbers of orphans overwhelm and weaken the family or kinship network which often abandons them. The orphans and their families are sometimes victims of discrimination due to misunderstandings about AIDS, and most of the relatives who become responsible for their well-being are old, sick or poor. They cannot give adequate care to the orphans who, under such conditions, may be neglected, abused and dislocated.

The AIDS epidemic has significant economic and social effects including high levels of orphanhood and widowhood, and the disruption of household management(Palloni and Lee 1990). It has a tremendous effect on the age and sex differentials. HIV transmission has a selective effect on elites, and an asymmetrical effect on the family. Some members are affected and others gradually deteriorate with female-headed households being affected most. Old people are forced to support their children and grandchildren.

Taylor, Seeley and Kajura (1996) report that the epidemic has increased women's responsibilities and their burden of caring activities in southwestern Uganda. Female heads of households, in particular, do not own or have direct access to the necessary finances to meet the family's health needs as expected of them. As they take on the additional burden of caring for those with HIV/AIDS, their social and economic resources become inadequate. Ugandan women are mothers as well as workers and have an important role in the community (Oywa 1995). In a country of patrilineal societies, resources are controlled by husbands while women remain a property to be inherited. In the epidemic, the inherited widows have become carriers of HIV. Taylor *et al.* (1996) further noted that the large number of orphans running their own households indicates the demise of the true family structure with the husband as the head, the mother responsible for caring for the children, and other family members.

From urban professionals to rural farmers, Ugandans in their most productive years are falling ill and dying from AIDS (*World AIDS Day Newsletter* 1994). These losses are felt at both household and national levels. Care for those who are sick tends to be home-based because of inadequate and expensive health care facilities, lack of medication, and poor staffing levels in health units. Women are responsible for most caring activities (Anarfi 1995; Barnett *et al.* 1995; Ekanem 1996; Taylor *et al.* 1996;). In the rural areas where most of the agricultural activities are carried out by women, HIV and AIDS-related illnesses are likely to lead to decreased agricultural production since productive labour is diverted to caring for the

sick, whose labour is also lost. Less time may be spent on the farm and the range of crops grown may be reduced. In Malawi, Cuddington and Hancock (1995) estimated that by the year 2010, Real Gross Domestic Product could be 10 per cent smaller than it would have been in the absence of AIDS.

Heterosexual intercourse and perinatal transmission from mothers to infants are currently the most significant causes of HIV infection in sub-Saharan Africa (Carael and Piot 1989; Ryder and Temmerman 1991). The biggest demographic impact of HIV/AIDS is therefore expected in the youngest age group, 0-5 years, and the age group of highest sexual activity, 20-39. Perinatal transmission can occur *in utero*, during delivery or after birth through breastfeeding (Gregson, Garnett and Anderson 1994). Studies have shown that 85 to 95 per cent of infected infants die before reaching the age of five (Stover 1994). AIDS may also contribute to increased mortality due to reduced care of orphans through parental sickness. This will affect the size of future population increments, the relative size of different age groups and family structure.

It has also been observed that the risk of being infected with HIV varies between the sexes. The risk of infection from man to woman has been estimated to be twice as high as that from woman to man (Peterman *et al.* 1988; Anderson *et al.* 1991). This difference in the risk of infection is likely to lead to significant differences in HIV/AIDS prevalence between the two sexes. A number of studies have reported more women infected than men in Africa (N'Galy *et al.* 1988; Mulder *et al.* 1994; Nakiyingi 1996). In Kenya out of the 200,000 people expected to die of AIDS by 1995, 66 per cent were women (Mathu 1994). AIDS is therefore likely to affect the overall sex ratio of the affected population, more so in the most affected age groups.

AIDS also affects the fertility within the population. It kills the most sexually active and reproductive segment of the population. HIV-related damage to the reproductive capacity of infected men and women affects the fertility of individuals and groups regardless of any awareness of the disease (Setel 1995). A high rate of seminal abnormalities likely to affect fertility among men as HIV advances was observed in the Central African Republic (Gresenguent *et al.* 1992). HIV-positive women have significantly more negative pregnancy outcomes, such as spontaneous abortions and still-births, than uninfected women (De Cock *et al.* 1994; Temmerman, Chomba and Piot 1994). This is likely to further decrease the number of children 0-5 years of age in the households.

AIDS kills mostly the sexually active population who are the most productive economically, leaving dependants who are children and elderly parents (Berkley *et al.* 1990). The orphans are left as a burden to the extended families and friends. This is likely to increase the dependency ratio within the households. However, the net effect will depend on the relative effects of AIDS on the mortality of adults and children. It will also depend on the effect of HIV/AIDS on fertility.

Sources of data

Three data sets used in this paper were collected in a multi-phase study entitled 'Evolution of household composition and family structure under conditions of high mortality in Uganda' conducted in six districts: Mbarara and Kabale in the southwest, Masaka in the south, Iganga and Mbale in the east and Hoima in the west. The northern region was not covered for security reasons. The first survey was carried out in mid-1992 using the elders' questionnaire. The second data set was collected in late 1992 and early 1993 using a structured questionnaire. A total of 1797 households consisting of rural and urban samples were picked from areas which had experienced deaths in the past ten years before the survey. A follow-up to the 1992/93 survey was conducted between July and August 1995 in the same households

to monitor the changes. Some additional households which had experienced deaths in the inter-survey period were added to the 1992/93 sample. This increased the number of households covered in the follow-up survey to 2352. Data were collected on background characteristics of the household members, contribution of members to the welfare of their household, mortality since the household was formed, orphanhood and care arrangements, migration and behaviour patterns of widows and widowers, current patient care in the household, attitudes towards illness and death in the community, and fertility. While information was collected on all members who had ever lived in the households since their formation, analysis is restricted to the household members who were still living in the households at the time of the surveys. The analysis excludes those who had died and those who had permanently left the households at the time of the surveys, except in the case of mortality analysis.

Results from the elders survey

More than 85 per cent of the elders interviewed reported AIDS as the major cause of death among people aged 18 - 35 years, about 45 per cent reported AIDS as the major cause of death for the adults aged 35 years and above, and only 18.7 per cent reported AIDS as the major cause of death among children aged 0 to 4 years. Among the elders, at least 90 per cent were of the view that AIDS had affected household composition in the community, while less than 10 per cent held different views. The reasons given included many people dying (44.9%), many orphans and orphans heading households (11.6%), loss of assistance to orphans and parents of the deceased (4.3%), and fear and behavioural change (2.9%). The remaining answers (36.2%) were not related to household composition.

The majority of elders interviewed said that AIDS had affected family structure, the reasons being: many young people dying (18.5%), many orphans left behind (20%) and families reduced in size (17%). Some thought there was no change and some gave reasons not related to family structures.

Characteristics of household heads

Major changes in the sex composition of the household heads were observed in the two data sets of 1992 and 1995 (see Table 1). Households headed by males substantially increased from 66.3 per cent in 1992 to 74.5 per cent in 1995 while the proportion of households headed by females dropped from 33.7 to 25.5 per cent. About three-quarters of the households covered in the 1995 survey were headed by males and one-quarter by females. Similar results were obtained from the Uganda Demographic and Health Survey of 1995.

Regarding the marital status of the heads of households, the percentages currently married were high in both the baseline and follow-up surveys. The proportion of household heads who were married increased from 74.4 to 80.4 per cent while the proportion of the separated and divorced decreased from 5.3 to 3.9 per cent and that of the widowed from 17.8 to 13.3 per cent. The category of the never married registered a slight decrease from 2.1 to 1.9 per cent. Some households (1.2% in 1992 and 1.0% in 1995) were headed by children below 18 years old. It is worth noting that in Table 1 the proportions of households headed by children and those headed by persons below 18 years differ. This is because those under 18 years were grouped under the categories of never married, married, separated or divorced, and widowed.

Table 1
Percentage of household heads by age and marital status

	Marital status			
Both sexes				
Year	Married	Separated & divorced	Widowed	Child
1992	74.0	5.3	17.8	0.8
1995	80.4	3.9	13.3	0.5
p = 0.000				
Male				
1992	90.1	2.5	4.3	0.9
1995	94.5	1.8	2.1	0.4
p = 0.000				
Female				
1992	42.2	10.8	44.4	0.7
1995	39.4	10.0	46.0	0.7
p = 0.307				
	Age in years			
Year	Under 18	18 - 40	41 - 60	61 & above
1992	1.2	35.1	40.6	23.1
1995	1.0	32.0	40.2	26.8
p = 0.031				
UDHS 1995	0.6	59.5	26.7	13.2

The observed changes in the household headship by marital status may be the result of remarriages which could have led to a fall in the proportion of households headed by the separated, divorced, and widowed. Some of the widows could have been inherited or remarried which is common in most African societies (Okeyo and Allen 1994). The death of some widows during the inter-survey period, especially those whose spouses had died of AIDS, could be another reason for the fall in the proportion of households headed by the widowed. This is because while the proportion of the married increased, the proportions of the separated or divorced and of the widowed decreased. Also migration by widows out of the survey areas may be responsible for the observed changes.

When the sex of household head was controlled, changes in marital status of male heads of households were significant($P<0.05$) while those of female heads were not ($P>0.05$). Generally, the households were headed by married persons. However, among the female-headed households, the largest proportion of heads were widows, 44.4 per cent in 1992/93, and 46 per cent in 1995, followed by currently married women, whose proportion dropped from 42.2 to 39.4 per cent in the inter-survey period. Households headed by females who were separated or divorced constituted 10.8 per cent in the baseline survey and 10.0 per cent in the follow-up survey. The never married were two per cent in the 1992/93 survey and four per cent in the 1995 survey.

In most societies in Uganda, it is very unusual to find households headed by married women. The large percentage of married women among the female heads of households (44.4% in 1992/93 and 39.4% in 1995) may be a result of widows being inherited and continuing to stay in their late husbands' homes, or deciding to marry one of the late husband's relatives.

Significant changes in the percentage of households headed by persons aged 18-40 years and 61 years and above have been noted. The percentage of households headed by persons aged 18-40 years fell from 35.1 to 32 per cent, and those with household heads aged 61 and above increased from 23.1 to 26.8 per cent. The other categories registered slight changes as shown in Table 1. The decline in the proportion of households headed by persons aged between 18 and 40 years may be the result of AIDS mortality in this age group. This is supported by results from the elders survey and the high incidence of AIDS-related deaths in that age group as reflected in the mortality data in Table 7.

The age distribution of household heads obtained from both surveys differs greatly from that in the Uganda Demographic and Health Survey of 1995 (Statistics Department 1996). While a large proportion of household heads falls in the age group 41 to 60 years in the two surveys, in the Uganda Demographic and Health Survey of 1995, it falls in age group 18 to 40 years. This is partly due to the nature of selection. Households which had experienced mortality in the last 10 years were considered during the two surveys which could have caused bias in the age distribution of household heads especially in the context of the AIDS epidemic. The Uganda Demographic and Health Survey covered the whole country including the northern region where HIV/AIDS prevalence is lower than in other parts of the country.

The increase in the proportion of households headed by married men could be a result of the elderly taking on the responsibility of heading households which were formerly headed by their sons or daughters-in-law before their deaths. There was an increase in the proportion of households headed by those aged 61 years and above. The small proportion of households headed by persons under 18 years may be a result of the role played by the extended family system. It is probable that children who lose both parents when they are too young to support themselves are looked after by relatives and friends. Ntozi and Mukiza-Gapere (1995) observed that as in the past, most relatives feel that the extended family is obliged to assist orphans. AIDS orphans are distributed to various relatives to be looked after. This has minimized the emergence of many households headed by children and orphans.

Changes in household structure

A household is a group of persons who normally live and eat together. The head is the owner of the dwelling. Different household structures have been identified based primarily on the characteristics of the household head. Table 2 shows the distribution of households according to different household structures. The majority of the households covered in the two surveys were extended households constituting 78 per cent in the 1992/93 survey and 64 per cent in the 1995 survey.

Different household structures have been identified in the two surveys. Monogamous households with children are those composed of a husband, wife and their children with or without other relatives. Those categorized as monogamous without children constitute husband and wife without children but possibly with other relatives. Polygamous households are those whose head has two or more spouses. A three-generations extended household contains a grandparent, child and a grandchild. Polygamous extended households are polygamous households with household members other than their children. Households classified as 'extended-skipped generation' have the middle generation missing, that is they have a grandparent and a grandchild with or without other relatives. A lone male household consists of a single male; a lone female household has a single female only. Male-headed and female-headed households are categorized according to the sex of the household head.

TABLE 2
Household structure

Type of household	1992		1995	
	No.	%	No.	%
Monogamous with children	789	43.9	1188	52.3
Monogamous without children	43	2.4	54	2.4
Polygamous with/without children	444	24.7	527	23.2
Extended 3 generations	707	39.3	833	36.7
Polygamous extended	354	19.7	337	14.8
Extended skipped-generation	16	0.9	37	1.6
Lone male	13	0.7	11	0.5
Lone female	19	1.1	11	0.5
Male-headed	1192	66.3	1693	74.6
Female-headed	605	33.7	576	25.4

In both surveys the majority of households were monogamous with children, constituting 43.9 per cent in 1992/93 and 52.3 per cent in 1995 while the proportion of monogamous without children remained the same, 2.4 per cent. While polygamous households did not change much during this period, polygamous extended households decreased from 19.7 to 14.8 per cent. There was a decline in the proportion of extended households with three generations from 39.3 to 36.7 per cent. Though the proportion of extended skipped generation households increased, it remained negligible. Lone male and lone female households were few. The major increase in the monogamous households with children may have been due to re-marriages. This is shown in Table 1 by the decline in households headed by the separated, divorced and widowed. The death of one spouse in a household where the head previously had two spouses can also change the household structure from polygamous to monogamous.

In most parts of Uganda, the total fertility rate is high. This normally causes a wide gap between the ages of the eldest child and the youngest. While some children may be in the high-risk age group, others may be in the low-risk categories. This has minimized the emergence of many skipped-generation households as a result of AIDS. As the elder sons and daughters die of AIDS, there are still younger ones in the household.

Household composition

Distribution of household members by relation to household head is given in Table 3. The two data sets reflect an extended form of family structure with daughters and sons constituting the largest percentage of household members, followed by grandchildren, and then other relatives. The proportion of daughters and sons increased from 47.7 to 49 per cent and that of other relatives fell from 9.7 to 7.2 per cent. The other categories registered slight changes.

Table 4 gives the percentage distribution of household members aged 12 years and above by marital status. There were slight increases in the categories of the never married and married, and decreases in the categories of the separated and divorced, and the widowed. Some widows may have migrated out of the survey areas, remarried or died during the inter-survey period.

Table 3
Percentage distribution of household members by relationship to head

	1992/1993	1995
Head	11.2	11.9
Spouse	8.2	9.7
Daughter/son	46.7	49.0
Nephew/niece	4.3	3.2
Grandchild	17.2	16.4
Other relative	9.6	7.2
Step-child	1.4	1.2
Other	1.5	1.4

Table 4
Percentage distribution of household members by marital status

Year	Never married	Married	Separated/ divorced	Widowed
1992	37.3	53.5	4.9	4.3
1995	37.9	54.6	3.9	3.6
p = 0.000				

Table 5 shows the percentage distribution of household members by age, sex and year of survey. Changes in the age composition of the household members were observed in some age groups. The age group 0-4 had the highest positive change for both sexes, perhaps because of the general decline in infant and child mortality during the inter-survey period. The remaining age groups registered either negative or negligibly positive change. For the males, negative changes were registered in the age group ranging from 5 to 24 while for the females negative changes were more pronounced in the age group 15 to 39 years. The age groups 40 years and above which are associated with lower risks of HIV registered slight changes for both sexes.

The household members' ages were further grouped to reflect changes in the ratio of economically active population as a result of AIDS in Table 5. As already stated, members who had died or had left the households permanently were not considered in the analysis: since they were not current members of the household, their inclusion was likely to lead to biased results. Significant changes were observed in the age categories considered. There was an increase in the proportion of household members aged below 15 years from 45.9 to 55.5 per cent and a fall in those aged 15-64 (active population) from 49.9 to 43.2 per cent during the inter-survey period. Overall, there was an increase of 5.6 per cent in the dependent population (below 15 years and 65 years and above). However, the proportion of those aged 65 years and above remained the same, 4.2 per cent for both years. Table 5 shows that the proportions obtained from the 1995 survey are comparable with those of the Uganda Demographic and Health Survey of 1995.

Although the pattern of changes in age structure is not clear for the males, the females' negative changes occurred mostly in the age group 15 - 39 years, the age group which is associated with high prevalence of AIDS (Mathu 1994). AIDS mortality is probably mostly responsible for the decline in the percentage of females in the age group 15-39 years since the majority of deaths in this age group are due to AIDS and AIDS related causes (see Table

7).

TABLE 5
Percentage age distribution of household members by sex and year

	1992		1995		Difference (1992/93 & 1995)	
Age group	Males	Females	Males	Females	Males	Females
0 - 4	14.4	12.8	22.7	22.8	8.5	10
5-9	16.7	15.7	15	14.8	-1.7	-1.9
10-14	17	15.6	14.7	15.1	-2.3	-0.5
15-19	13.7	11.4	12.4	9.7	-1.3	-1.7
20-24	9.3	8.4	8.3	7.4	-1	-1
25-29	6.1	7.2	5.4	5.2	-0.7	-1
30-34	4.9	5.7	4.2	4.9	0.7	-2
35-39	3.5	4.7	3.2	3.6	-0.3	-1.1
40-44	2.3	3.8	2.3	3	0	-0.8
45-49	2.3	3.1	1.8	2.7	-0.5	0.4
50-54	2.4	3.2	2.4	3	0	-0.2
55-59	1.5	2.2	1.5	1.6	0	-0.6
60+	6.3	6.2	6.1	6.2	0.2	0

Active and non-active population				
Year	Below 15	15-64	65 and above	Below 15 & above 65
1992	45.9	49.9	4.2	51.1
1995	52.5	43.2	4.2	56.7
p=0.000				
UDHS 1995[a]	54.4	45.2	3.3	57.7

[a] Statistics Department (Uganda) and Macro International Inc. (1996).

The increase in the proportion of dependants may be attributed to AIDS which kills mainly persons of the most productive age group. This is supported by results from the mortality data: AIDS and AIDS-related causes contributed a large proportion of deaths within the productive age groups. Similar findings were obtained from the elders' survey.

Mortality data

The baseline survey registered a total of 3980 deaths since the formation of the households, 55.5 per cent males and 44.5 per cent females. The 1995 follow-up survey registered 1505 deaths which had occurred within a period of three years from the baseline survey: 50.3 per cent were males and 49.7 per cent females. Significant changes in the distribution by sex of the dead were observed. While there is a big difference between the proportions of males and females in the 1992 mortality data, which covered all deaths since the households were formed, the difference is very small in the 1995 mortality data which covered only deaths in the last three years. The narrowing of the gap between the two sexes may be a result of the AIDS mortality differential by which more males than females die of the disease. Berkley *et al.* (1990) claimed that more women than men were infected by HIV. It is also possible that among the infected, men are more likely than women to migrate out of the areas.

The age at death was grouped into four categories: 0-4 age group affected by HIV/AIDS

through vertical transmission; 5-19, the low-risk category; 20-40, the high-risk category; and 40 and above, low-risk category. A total of 3918 deaths were reported with ages at death in the baseline survey, and 1482 in the follow-up survey. Table 6 shows that significant changes were observed in the age at death between the two surveys. The majority of deaths were reported in the age group 20-40 years with 43.7 per cent for the baseline survey and 50.4 per cent for the follow-up survey. For the age group 0-4 the percentage fell from 23.6 to 19.6 per cent and for age group 5-19 from 11.4 to 8.1 per cent. The category of 41 years and above registered a slight increase from 21.3 to 21.9 per cent. Age group 20-40 which had the highest percentage of AIDS and AIDS related causes of death as compared to other causes (see Table 7), also had the highest proportion of deaths and increase. Age group 5-19 which had a fairly large decrease also had smaller proportions of AIDS and AIDS-related deaths.

TABLE 6
Percentage distribution of deaths by sex, age and year

	Sex		Age			
Year	Males	Females	0 - 4	5 - 19	20 - 40	41+
1992	55.5	44.5	23.6	11.4	43.7	21.3
1995	50.3	49.7	19.6	8.1	50.4	21.9
		p=0.001				p=0.000

The increase in the proportion dead between the baseline survey and the follow-up survey in the age group 20-40 years may be attributed to AIDS since this is the most affected age group. Table 7 indicates that at least 65 per cent of the deaths in the 20-40 age group were due to AIDS and AIDS-related causes. Similar results were observed from the elders' survey. Although an increase in the proportion of deaths in age group 0-4 years was expected as a result of vertical transmission of HIV and inadequate parental care where the parental morbidity and mortality are high, a decrease was registered. The decline could have been caused by the decline in child mortality due to the Uganda National Expanded Immunisation Programme which substantially increased immunization coverage between 1988/89 and 1995, and a general decline in child mortality from 119 to 81 per 1000 (Statistics Department 1996). This could have offset the negative effect of AIDS in the age group. Also the proportion of deaths due to AIDS and related diseases is lower than that of other causes of death in the 0-4 age group. The slight increase in the age group 41 years and above may be a result of the extension of AIDS mortality to this age group owing to the long incubation period of about 10 years (Chin and Lwanga 1991; Philipson and Posner 1995).

TABLE 7
Percentage distribution of deaths by age, cause and year of survey

Age group	1992			1995		
	Percentage dead	AIDS & AIDS-related	Other causes	Percentage dead	AIDS &AIDS-related	Other causes
0-4	33.6	30.9	69.1	19.6	28.8	71.2
5-19	11.6	38.9	61.1	8.1	36.4	63.6
20-40	43.7	65.8	34.2	50.4	65.5	34.5
40+	21.3	32.8	62.2	21.9	38.7	61.3

Changes in orphanhood

Those considered orphans in this study are household members under 18 years who had lost at least one of their parents at the time of the survey (Table 8). The baseline survey data indicated that 37.3 per cent of the children under 18 years had lost at least one of their parents as compared to 27.4 per cent in the 1995 survey. Because of the selection of households with recent deaths, the prevalence rates obtained from the two data sets are far higher than the 11.6 per cent obtained in the 1991 Census (Republic of Uganda 1995) and 14.4 per cent in the 1995 Demographic and Health Survey (Statistics Department 1996). Double orphans, those who had lost both parents, constituted 7.1 per cent in the 1992 data and 5.8 per cent in the follow-up data. As shown in Table 8, 13.3 per cent of the children in the 1992 survey had lost their mothers as compared to 11.7 per cent in the follow up survey. Those who had lost their fathers were 31.6 per cent in the baseline survey and 21.8 per cent in the follow-up survey. For both surveys paternal orphanhood is higher than maternal orphanhood. Comparing the results from both surveys on orphanhood, there was a fall in the percentage of orphans among children under 18 years. This is also reflected in the average number of orphans per household in the different districts covered in the survey, with the exception of Kabale district which has an abnormally high rate of orphanhood, especially paternal orphanhood. As expected, in both surveys, Masaka registered the highest number of double orphans, 15.4 per cent in 1992 and 10.4 per cent in 1995; Hoima had the lowest in 1992 and Iganga in 1995. The average number of household members ranged from 7.2 in Kabale to 10.2 in Masaka in 1992, and from 7.7 in Kabale to 9.1 in Iganga in 1995. Apart from Kabale and Iganga, the other districts showed decreases in the average number of household members.

TABLE 8
Proportion of orphans by district, year of survey and parent

	Proportion of orphans		Average per household		Average in household		Proportion of orphans by deceased parent					
							Mother		Father		Both	
District	1992/93	1995	1992	1995	1992/93	1995	1992/93	1995	1992	1995	1992/93	1995
Mbale	30.8	25.1	1.5	0.9	8.7	8.0	10.1	11.8	25.3	18.4	4.3	4.7
Iganga	38.6	20.2	1.8	1.1	7.8	9.1	10.4	7.1	33.9	16.2	5.2	2.8
Masaka	48.9	37.9	2.9	2.0	10.2	8.4	24.3	19.4	40.7	29.3	15.4	10.4
Mbarara	25.4	26.1	1.2	1.1	8.2	8.3	8.4	10.9	21.3	20.4	4.0	4.9
Kabale	59.4	38.4	2.0	1.4	7.2	7.7	18.8	14.3	54.1	33.9	10.8	9.3
Hoima	24.7	19.4	1.2	0.9	10.0	8.6	7.5	8.5	19.5	15.0	2.2	3.6
	37.3	27.4	1.7	1.2	8.7	8.4	13.3	11.7	31.6	21.8	7.1	5.8
UDHS 1995		14.4				4.8		4.5		9.8		1.9

Results from the two data sets indicate a decline in the prevalence of orphanhood. This may be a result of the decline in AIDS mortality as a result of the government's effort to create awareness of the epidemic within Uganda, which is reflected in the high rate of knowledge about AIDS as observed in the elders' survey. The changes in orphanhood observed varied from district to district. This is expected since the districts considered in the survey were at different stages of the epidemic. Masaka district, one of the first districts in Uganda to be affected by AIDS, had the greatest decline in the prevalence of orphanhood. This could have been caused by many of the orphans growing up (18 years and above); and adult deaths from AIDS, which caused the increased number of orphans, may have reached their peak and be declining.

Table 8 shows that paternal orphanhood is more frequent than maternal orphanhood in most of the districts covered by the survey. This may be the result of the polygamous nature of Ugandan societies: if a man has three wives and dies, all the children belonging to the three widows are regarded as orphans. The difference is also attributed to differential mortality between the two sexes. Male mortality has been higher than female mortality in most populations.

Changes in widowhood

Table 9 shows the proportions widowed among women aged 15 years and above from the two data sets. In general there was a decline in the proportion of widowhood during the inter-survey period. Apart from Mbale and Hoima, the other districts show high proportions of widowhood in at least one of the age groups within the age range 25-39 years which can be attributed to AIDS. The overall proportion of widowhood decreased from 10.8 per cent in the 1992/93 survey to 9.2 per cent in 1995.

The widows were further investigated to identify their relationship to the head of the household in which they were living (Table 10). In the baseline survey, 54.6 per cent of the widows were household heads and the percentage increased to 59.4 in the follow-up survey. Although the proportions of widows who were household heads varied from district to district, the percentage in any of the six districts was at least 40 per cent, ranging from 40.3 in Hoima to 64.5 in Kabale in the baseline survey, and from 40.4 in Iganga to 68.8 in Kabale in the follow-up survey. The variation in the proportion of widows who were household heads in the different districts is possibly due to variations in the treatment of widows in the different cultures. The percentage of widows who lived with their parents ranged from 4.2 per cent in Mbarara to 17.8 in Kabale in 1992/93 and from 3.5 in Mbale to 14.7 in Mbarara in 1995.

When age is controlled for in Table 11, it can be seen that the widows who were household heads were mainly the elderly while those who lived with their parents were mostly young or middle-aged. A large proportion of widows lived with relatives and friends. The widows who lived with their parents, other relatives and friends may be those who were victimized by their in-laws after the death of their husbands and were forced out of their former husbands' homes. The overall decline in the prevalence of widowhood observed during the inter-survey period may be a result of the death of many AIDS widows, and of the decline in AIDS mortality indicated by the decline in HIV infection rate observed from the HIV/AIDS surveillance report of March 1997. As AIDS deaths become more and more common in the community, the prejudice against AIDS widows reduces. This may be responsible for the increase in the proportion of widows who were household heads.

Table 9
Percentage of widows by age, district and year of survey

	Mbale		Iganga		Masaka		Mbarara		Kabale		Hoima	
Age group	1992	1995	1992	1995	1992	1995	1992	1995	1992	1995	1992	1995
15-19	0	0.6	0	0	0	0.6	0	0	0	0	0.6	0
20-24	2.8	2.7	5	2.2	2.0	0	3.0	4.3	5	2.3	0.6	1.4
25-29	2.6	1.5	16	3.1	16.9	6.8	6.8	2.1	14.7	8.3	3.7	2.2
30-34	4.5	3.7	16.4	7.3	11.1	10.1	10.9	5.3	9.2	13.2	8.2	5.7
35-39	5.4	7.3	16.7	11.4	15.2	11.1	10	12.5	24.6	7.6	8.5	1.7
40-44	12.5	13.2	14.6	3.4	14.0	4.3	7.7	14	11.4	28.3	6.2	2.5
45-49	10.0	11.8	16.7	12.3	5.1	21.1	30.6	15.6	34.9	12.2	2.3	11.8
50-54	0	10.2	32.7	14.3	16.9	10.3	40.9	17.8	25.0	15.4	10.8	18.5
55-59	26.3	32.4	28.1	17.2	18.8	5.3	21.1	20.0	29.0	16.2	18.6	13.8
65+	28.3	26.7	47.7	43.9	23.3	34.5	44.4	21.2	31.4	21.1	28.6	40.8

Table 10
Percentage distribution of widows by relationship to head of household, district and year of survey

	All districts		Mbale		Iganga		Masaka		Mbarara		Kabale		Hoima	
	1992	1995	1992	1995	1992	1995	1992	1995	1992	1995	1992	1995	1992	1995
Head	54.6	59.4	60.0	66.7	50.5	40.4	62.2	69.8	49.3	52.9	64.5	68.8	40.3	63.6
Spouse	1.7	1.8	0.0	3.5	1.8	1.1	2.7	3.2	1.4		0	1.1	4.2	3.0
Daughter	9.8	9.3	8.9	3.5	5.5	7.4	6.8	12.7	4.2	14.7	17.8	10.8	13.9	6.1
Others	33.7	29.5	31.1	26.3	41.3	51.1	28.4	14.3	45.1	32.4	17.8	19.4	41.7	27.3

Table 11
Percentage distribution of widows by relation to household head and age

Age group	Head		Daughter		Other	
	1992	1995	1992	1995	1992	1995
15-19	0	0	1.7	3.9	1.4	2.7
20-34	21.1	11.6	63.3	46.7	22.0	16.0
35-49	32.1	29.7	26.7	38.8	14.4	11.3
50+	46.9	58.7	8.3	10.5	62.1	69.8

Conclusion

The three data sets have indicated high levels of orphanhood and widowhood. However, a general decline in the prevalence of orphanhood and widowhood between the the two surveys was observed in the study. AIDS and AIDS-related mortality was high among the adults in the two data sets.

The study revealed that male-headed households increased while female-headed households decreased . Also monogamous households with children increased and polygamous extended households decreased. Although the proportion of extended skipped-generation households increased, it remained small.

Households headed by the married increased while those headed by the separated, divorced and widowed decreased. Since the second survey was a follow-up of the first, the increase in households headed by the married is a result of remarriages. As a result of AIDS, there was also a general decline in the proportion of households headed by persons in age groups most at risk of AIDS; households headed by the elderly increased.

Households headed by children are rare, indicating the major role played by the extended family in the upbringing of orphans, especially those who lose both parents from AIDS. During the inter-survey period the dependency burden increased: this may be attributed to AIDS which kills mainly persons in the most productive age group.

Since the surveys were conducted at least 10 years after the first AIDS case was identified in Uganda, the changes observed in the data sets may not all be the result of AIDS but of non-AIDS causes as well.

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