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Headship of older persons in the context of HIV/AIDS in rural South Africa

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Abstract

This paper examines older persons' positions as heads of households in the Agincourt sub-district of Mpumalanga Province, South Africa. Older person's access to non-contributory pensions in a context of AIDS-related chronic illness and premature death, might increase their household responsibilities which, in turn, may be manifested in higher rates of household headship. We use descriptive analysis to outline the traits of household heads, compare household characteristics, in particular recent mortality experience, across headship types (male/female, pre/post-pension eligibility). While some significant differences in household composition exist across headship types, older persons were no more likely to be heading households with a HIV/AIDS-related death over the 2000-2005 period—prior to extensive antiretroviral (ARV) rollout. This provides an important starting point for further investigations aimed at understanding the impact of HIV/AIDS on older persons' lives, and as a baseline for measuring the effects of ARV rollout on older persons' status in AIDS-endemic communities.

Keywords

Aging; South Africa; Headship; HIV/AIDS; Households

Introduction

In this paper, we examine older persons' roles as heads of households in the context of HIV/AIDS in the Agincourt sub-district of Mpumalanga Province, South Africa, where the provincial antenatal prevalence rate in 2009 was estimated at 34.7% , compared to 29.4% at the national level. These rates increased from 29.2% and 24.8% respectively, in 2001, with most of the increase occurring between 2001 and 2005 (South African Department of Health). Headship in most South African contexts is seen as a reflection of both income-earning and decision-making status in the household (Budlender 2003; Posel 2001). South Africa provides an interesting case for the study of older persons' headship due to the co-existence of high HIV-prevalence rates and the presence of a non-contributory state-funded pension.¹ In this paper, we consider older persons' headship partly as a function of their income earning capacity through pensions, which, in a high HIV-prevalence/high

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¹The age-eligibility for both men and women as of 2010 is age 60. However, we define "older" persons, and older household heads, as pension age-eligibility during the period of data collection (2000-2005); thus, men aged 65 and over and women aged 60 and over.

unemployment context, could assume great salience. These analyses are an important first step in considering how older persons' position in households may be changing with increases in mortality and morbidity among prime-aged adults; and, it acts as a baseline perspective of household dynamics prior to the extensive public service rollout of antiretroviral therapies (ART).

HIV/AIDS, Aging and Households in South Africa

The United Nations (2007) projected that the percent of the South African population over age 60 will nearly double from 7% in 2006 to 13% in 2050. Changes in age and cause-specific mortality have shifted in South Africa, with significant increases in mortality rates among children under five, men 30-49 years old, and women aged 15-64 (Anderson and Phillips 2006; Kahn 2006; Zuberi, Sibanda, and Udjo 2005). Much of the mortality increase among children and prime-aged adults is due to AIDS, whereas the mortality increase among women in the 50-64 age group is primarily due to non-communicable diseases such as stroke, diabetes and hypertension (Kahn 2006; Kahn et al. 2006; Mayosi et al. 2009; Thorogood et al. 2007). AIDS will continue to influence the future age distribution of the South African population, mostly through selective mortality at ages of 30-50, though the pattern is likely to change as antiretroviral therapies (ART) become more widely available (Johnson and Dorrington 2006). Even with some ARTs available in the early-2000s, however, death rates have continued to rise in this age group (Anderson and Phillips, 2006).

Household headship can help elucidate issues related to household composition and structure in high HIV-prevalence societies (Ferreira 2004; Merli and Palloni 2004). Certain age and gender patterns emerge when examining headship and household membership in South Africa. Older women are more likely than older men to live in households headed by their spouses or children (Numbissi and Zuberi 2001); thus, when a spouse or adult child who had been the household head dies, the older woman is likely to take over this role. Female household heads are more likely than non-household heads to be widowed, or divorced, corroborating the previous point (Kinsella and Philips 2005; Ogunmefun 2008). Increasing numbers of households headed by older persons and women in sub-Saharan Africa can be associated with households losing prime-aged members to the HIV/AIDS epidemic (Ferreira 2004; HelpAge International 2004a, 2004b, 2005; Monasch and Boerma 2004).

HIV/AIDS affects older persons in multiple ways. Particularly due to the high prevalence of multigenerational households, they become caregivers to grandchildren after the death of their own children (Møller 1998; Møller and Devey 2003; Munthre and Maharaj 2010). Caregivers for adult children living with HIV/AIDS and grandchildren orphaned by AIDS, experience substantial emotional, economic, and physical strain (Ferreira 2004; HelpAgeInternational 2003, 2008). In addition, older persons and their households often experience the loss of income and support previously provided by those who become sick or are lost to AIDS (HelpAgeInternational 2005; Williams and Tumwekwase 2001). Finally, the death of prime age adults is likely to alter household composition and in particular, the positioning of older persons in the household (HelpAgeInternational 2004a, 2004b; Monasch and Boerma 2004).

South Africa provides a unique case for studying the impacts of AIDS on older persons because it is among the few low-income countries in which the government provides older persons access to a state-funded non-contributory old-age pension. The pension program began in 1928, was minimally expanded to the Black South African population in 1944, and expanded further in the 1990s (Legido-Quigley, 2003). While only 16% of the White South Africa population access the pension, approximately 90% of the Blacks do (Burns, Keswell,

& Leibbrandt, 2005). Prior to 2008, men aged 65+ and women aged 60+ who qualified based on an income means-test were eligible to receive a pension; after 2008, both men and women became eligible at age 60. In 2004, the grant was ZAR 740, or about USD 100; as of April 2011, the grant amount was increased to ZAR 1140, the equivalent of about USD 160 (www.services.gov.za).

It has been shown that the pension can add significantly to older persons' household income and is quite often the most reliable income source (May 2003; Møller and Devey 2003; Schatz 2007). Pensions allow older individuals to access nutritional foods and public health services, but normative pressure pushes older persons to pool their income with their households and kin, such that pension funds support the needs of other household members (Burns, Keswell, and Leibbrandt 2005; Case and Menendez 2007; Sagner and Mtati 1999), including pensioners' sick children and grandchildren ([SADSD] 2002). Thus, income intended to sustain individuals in their old age is diverted to maintain households (Bohman et al. 2007; Ferreira 2004; Ogunmefun 2008; Ogunmefun and Schatz 2009). These same households often make use of a number of other government supported social grants—e.g. child support grants, foster child grants, disability grants. However, these grants offer less of a cash transfer per month, and require more documentation (Booyesen and Van der Berg 2005).

In an altruistic model of the household, individuals work for the collective good of the household (Becker 1974; Hermalin 2002). While the most obvious expression of this ethic is the pooling of resources, it can also be reflected in household configuration and the designation of headship. As mentioned above, the illness and loss of a prime-aged member, whether due to AIDS or another cause, often necessitate older persons assuming additional caregiving and financial responsibilities (Ferreira 2004; Møller 1998; Møller and Devey 2003; Williams and Tumwekwase 2001). In addition, high rates of unemployment and non-marital childbearing intensify the need for older persons to provide support for the household, and support grandchildren in their homes (Munthree and Maharaj 2010; Schatz and Ogunmefun 2007). Children in households with a pensioner, particularly a female pensioner, fare better than children in households without (Case and Deaton 1998; Case and Menendez 2007; Duflo 2003). Thus, conditions created by unemployment, lack of support for children and HIV/AIDS-related deaths might create a void in headship that older persons must fill.

Data & Study Context

In this analysis, we use the Agincourt Health and Demographic Surveillance System (AHDSS) census data, which allows us to track changes in the population and within households over time. The research site is located in the sub-district of Agincourt, which is 500 kilometers northeast of Johannesburg in Mpumalanga Province. Part of a former homeland and a destination for people forcibly resettled under apartheid, this semi-rural area has had high rates of both labor migration and refugee influx from neighboring Mozambique. From 1992 to 2005 Agincourt's sub-district experienced a dramatic increase in HIV-prevalence (Collinson 2009; Kahn 2006; Madhavan and Schatz 2007; Tollman 2008), accompanied by significant social, economic and political change resulting from the collapse of apartheid and the transition to a democratic system (Allison and Harpham 2002; Hunter 2010; May and Norton 1997). Despite these changes, the population continues to struggle with low levels of education and high rates of unemployment (Collinson 2009). There are two hospitals, a private and public health center, as well as several clinics that service the area. Voluntary testing and counseling services are available in most clinics and ARTs are recently available in selected clinics.

The longitudinal AHDSS has collected data annually since 1992 in 21 villages (6 villages were added in the 2007 update) with a population in 2005 of approximately 70,000 people in 12,000 households. Each annual update includes (1) household census to record all changes to household membership that occurred in the previous year, (2) vital events that occurred in the previous year, and (3) subsequent verbal autopsy (VA) to identify cause of death for those who died in the previous year. In this analysis, we use verbal autopsy data to distinguish HIV/AIDS-related deaths from other causes of death (Kahn et al. 2000). A validation against hospital records showed that the VA captures and correctly assesses the majority of HIV/AIDS-deaths in the area in the absence of serotesting (Kahn 2006). Thus, the VAs provide a reasonable estimate of HIV/AIDS-related mortality in the area, although HIV/AIDS-deaths are still prone to underestimation, with a number of AIDS-related deaths likely coded as undetermined.

In the AHDSS, the household member who completes the census form designates, or confirms, if unchanged, the household's head. The reporting member also describes the relationship of each household member to the head (e.g. wife/husband, sister/brother, son/daughter, son of sister, etc). As has been described in other literature (Budlender 2003; Posel 2001), the designated head in the majority of households in Agincourt tends to be the oldest household member (87% in 2005).

We use descriptive analysis (1) to compare the characteristics of households across headship types stratified by age group and sex (i.e. older men, older women or prime-aged adults) in 2000 and 2005, and (2) to compare cause of death and other attributes of the death in households across headship types in 2005. The permanence of poverty and the knock on effects of HIV-related illness and death on other households make it difficult to isolate the differences between households with and without a death (Hunter, Twine, and Johnson *forthcoming*; Madhavan, Schatz, and Clark 2009; Schatz and Ogunmefun 2007). However, AIDS does have a prominent presence in the site, with other work from Agincourt showing that labor migrants come back to the Agincourt area to die after contracting and/or becoming sick with HIV/AIDS elsewhere (Clark et al. 2007). Below we examine how AIDS might be affecting older persons' position in the household, namely as household heads.

Results

Table I provides compositional features of the three household headship types: headed by older men, older women, and prime-aged adults.ⁱⁱ The table includes 11524 households present in 2000 and 12077 households present in 2005. Some households that were present in 2000 dissolved before 2005 while other households were created during the period (see discussion of dissolved households in Madhavan, Schatz and Clark 2009). Among all households, the average age of household heads rose between 2000 and 2005 from 45.8 to 48.2. Over this same period the percent of households headed by women increased from 32.3% to 38.1%. Older women headed a larger proportion of all households than older men at both time periods, probably reflecting differences in life expectancy across sex; and, there was a greater increase in the percentage of all households headed by older females over time.

In 2000, households headed by older men, women and prime-aged adults are significantly different in every household composition feature (mean size, average dependency ratio, average percent female, and mean number of children) except the presence of at least one

ⁱⁱWhile the popular press often calls attention to the issue of child-headed households as consequence of the AIDS epidemic, there were only 14 households in each time period with a designated head below the age of 15. Given these were less than 1% of households they are not differentiated in the table.

orphan. Older men's households are the largest (mean size 7.3, compared to 6.0 for the other two categories). In older female-headed households, on average, a majority of members are female (.64), whereas the proportion is on average below .5 in the other two household types. The average dependency ratio (individuals over age 60 + children under age 15/individuals 15-59) in households headed by older persons is "dependent" heavy (>1); households headed by a prime-aged adult are "productive" member heavy (<1). Similar significant patterns are seen across household types in 2005, except that percent of households with at least one orphan differ significantly across household types in 2005.

Over time, households have become slightly smaller, have become more productive heavy, and maintained similar proportions of male and female.ⁱⁱⁱ Whereas households in 2005 have, on average, fewer children, there has been an increase in the percentage of households with at least one orphan. The orphan change is noteworthy because the increase is seen in households headed by prime-aged adults and older women, but not in households headed by older men. The AHDSS collects household-level asset information at regular intervals rather than individual-level income information. Since we do not have income data for 2005 in the AHDSS, it is not possible to assess whether this individual is also the primary income-earner in the household. In both 2000 and 2005, pension-age eligible men and women headed about 20% of households where the oldest member was head (not shown in table).

In Table II, we move from looking at aggregate differences at two points in time to examining headship transition over the period. Of households with a prime-aged adult head in 2000, 17% dissolved before 2005, and 8% changed from a prime-aged adult to an older head by 2005; these were evenly divided between changes to older male and older female heads. Of the 4% of prime-aged headed households in 2000 that changed to an older man head by 2005, 71% were headed in 2000 by a man aged 60-64, which may mean that the same individual was head at both points in time but his status changed due to his aging into the "older" age group. Of the 4% of prime-aged headed households in 2000 that were headed by an older woman in 2005, 47% were headed in 2000 by a woman aged 55-59; for these households the change in headship type also may be attributable to aging. For each headship type in 2000, the greatest percentage of households remained in the same headship type in 2005. The least likely change from 2000 to 2005 was from an older woman headed household to an older man headed household; this is likely due to the fact that older women often become heads when their spouses die, so these households are unlikely to have an older man in residence to replace the older woman head if she dies or moves out.

Prime-aged headed households had the highest percentage of households that dissolved (17%), followed by older woman-headed (15%) and older male-headed (12%). Interestingly, nearly two-thirds of older male-headed households that dissolved had experienced a death over the period, compared to one-third of older female-headed households and one-fifth of prime-aged headed households in 2000 (not shown in table). This may mean that a death, particularly of an older head, may be more likely to lead to the dissolution of households. We now examine more explicitly the role of death in conditioning some of the changes outlined in the tables above.

Figures I and II bring together headship type and households' mortality experience.^{iv} Figure I shows the percent of households within each headship type in 2005 that experienced a prime-aged or older HIV/AIDS-related or other death over the period, i.e. at some point

ⁱⁱⁱWhile the decrease in household size is small over the period, it reflects similar changes shown in other work from the site beginning in the mid-1990s (Wittenberg and Collinson 2007).

^{iv}These figures show the most recent death over the period, future work will explore differences by headship type in the percentage of households that have experienced multiple deaths (by age and cause of death) over the period.

between 2000 to 2005. Households headed by older persons in 2005 experienced a higher percentage of each type of adult death compared with households headed by a prime-aged adult in 2005; however, these differences across headship type and death category are not significant. Of households headed by older women in 2005, 2% had experienced an older HIV/AIDS death and 11% had experienced an older death from another cause over the period; in both of these cases, the death may have been of the woman's husband leaving his widow to become head. In households headed both by older men and older women, 7% experienced a prime-aged HIV/AIDS-death and 9% experienced a death of a prime-aged adult to another cause. A lower percentage of households headed by a prime-aged adult (N=9636) experienced deaths in each category: 7% had a prime-aged adult death from another cause, 5% a prime-aged adult HIV/AIDS-death, 4% an older death from another cause, and 1% an older HIV/AIDS death. There was little difference in the percentage of households with a child death across headship types, with approximately 4% of each type of household having experienced a child death. The distribution of all deaths across household types is statistically significantly different at the .001-level.

Figure II is limited to only those households that transitioned from one headship type in 2000 to a different type by 2005. The 2005 headship type could be a result of (1) an older male or female head in 2000 being replaced by a prime-aged adult head by 2005 (N=269, 24%); (2) prime-aged adult or older male head in 2000 transitioning to an older woman head in 2005 (N=514; 45%); or (3) a prime-aged head or an older woman in 2000 transitioning to an older man head in 2005 (N=352, 31%). For each headship type in 2005, the figure shows the distribution of households without death and with deaths, further disaggregated by age and cause of death categories. The three types have statistically significantly different distributions ($p > .001$)-level. A similar analysis of households without a change in age/sex of household head over the 5-year period (not shown) did not differ significantly by headship type in 2005. Of households headed by a prime-aged adult in 2005, 65% experienced a death to an older person (6% from HIV/AIDS, 59% from another cause) over the period. In all likelihood, in each of these cases, the former head, whether parent or spouse, is the person who died, thus mandating the change to a prime-aged adult head. The remaining households headed by a prime-aged adult that experienced a death (3% child deaths, 5% HIV/AIDS prime-aged death, 6% other prime-aged death) are fewer in both number and percent than in households headed by an older person in 2005.

In the households headed by an older individual in 2005 but not in 2000, it is possible that the person heading the household remained the same, thus the change is an artifact of aging (i.e. a man 60-64 in 2000 moved into the 65+ category in 2005). In 16% of households headed by an older woman (21% of households without a death, 14% of HIV/AIDS death households, and 11% of other death household) the change in headship type may be attributed to aging of the 2000 head; in 30% of households headed by an older man (23% of households without a death, 34% of HIV/AIDS death households, and 51% of households with a death from another cause), the change may be attributed to aging. We have left these individuals in Figure II because although the head did not change, the heads' age (now being 65+/60+) made him/her pension eligible, thus changing his/her status, which may influence responsibilities and relationships within the household (Schatz et al. 2011). Older women headed households that did experience an older death (4% with an older HIV/AIDS death and 23% with an older death from another cause) are in most cases likely to be the older woman replacing her deceased husband as household head. Compared to older female-headed households, a lower percentage of older male-headed households experienced an older death (1% with an older HIV/AIDS death, 6% with a death from another cause). In older headed households, the percent that experienced a prime-aged death during the period were similar (8-9% with a prime-aged HIV/AIDS death, 11% with an other prime-aged death). While the two distributions of the male and female older headed households are

significantly different from one another, deaths of older persons drive these differences. There are no significant differences between the older men's and women's distributions when comparing prime-aged and child deaths by cause of death.

Discussion

In this paper we examined older people's headship roles at two points in time, with age groupings mirroring the age at which individuals become pension-eligible in South Africa. The analyses show important differences in change over time between households headed by older women and older men. Older women head a higher percentage of households in the site than older men, and that difference is increasing. More households experienced a transition from older male to older female in the 2000-2005 period than the other way around. While there is some indication of an association between the experience of an HIV/AIDS death and headship by older women in 2005 (Figures I and II), this first level of analysis does not point to statistically significant differences between cause of death and elderly headship. This being said, the age and gender differences that emerge should continue to be tracked and unpacked in future work.

Although HIV/AIDS deaths make up 22% of all deaths in the site, we expected to see them differentially distributed across headship types, with a higher percentage of older heads bearing the burden of these deaths in their households than in prime-aged adult headed households. Households with an HIV/AIDS-related death are different from households that have experienced another cause of death due to the following: (1) the long and recurring illness preceding HIV/AIDS-related deaths, (2) the age pattern of mortality, (3) the clustering of deaths within households, and (4) the stigma related to the disease. These issues may directly and indirectly impact older persons' likelihood of taking on household headship.

The protracted illness prior to an HIV/AIDS-related death may increase the need for pensioners' contributions to the household during this period to cover medical expenses, and replace lost income if the sick member had been working. Dependence on pension income may condition the household to depend on that income and the older person as a decision-maker, which may, in turn, catapult the person into a headship role. In such cases, the older person might take on the headship role during the sickness (i.e. prior to a death) or after the death occurs.

The age pattern of mortality, as well as clustering of deaths, may create a situation where there are no other productive household members to take on the role. Among prime-aged adults, the majority of AIDS-related deaths are among women, but in the older age-set it is men who are dying of HIV/AIDS (but the numbers are small) (Kahn 2006; Anderson and Phillips 2006). If this pattern continues, older women may be the only ones available to fill the role as household heads. The pattern may also contribute to an increase of older women's households with at least one orphan, which more than doubled from 2.2% in 2000 to 4.6 in 2005. Finally, HIV/AIDS-related stigma (Kalichman and Simbayi, 2004; Ogden and Nyblade, 2005; Ogunmefun, Gilbert and Schatz 2011) may create a situation in which a household is unable to attract other productive-age members to join the household during illness and after an HIV/AIDS-death. In such a case, prime-aged adults may not want to take on the financial obligations or caregiving responsibilities that would be incumbent upon a new productive household member.

Mortality patterns and stigma may lead to pensioners being the only available adults to fill the headship void. While we did find that the percent with a recent adult death related to HIV/AIDS was greater in households headed by older women, the gender and age of head

differences were fewer than expected. If these conditions do lead to older persons being more likely to head households where an HIV/AIDS-death has occurred, it should be explored whether gendered roles and responsibilities, women's longer life expectancy and earlier pension-receipt make older women even more likely than older men to take on headship of vulnerable households where an adult had died of HIV/AIDS-related causes.

The results presented here show a minimal impact of AIDS on older persons households, yet they do not mean that the elderly are not being affected by the epidemic. Indeed qualitative analyses from the same site point to a deepening sense of desperation from the increased burdens placed on older persons coping with the death of a child from HIV/AIDS (Ogunmefun, Gilbert and Schatz 2011; Schatz and Gilbert 2011; Schatz, Madhavan and Williams 2011). This sentiment of taking on economic and decision-making responsibilities extends to other caregiving work for the sick and orphaned (Ogunmefun and Schatz 2009; Schatz 2007; Schatz and Ogunmefun 2007), even if such responsibilities do not position them formally as household heads. Indeed this is an interesting discord that merits further examination. A link between pension receipt and headship does not necessarily mean that elders attain higher symbolic status. Their indispensability as income-earners does not automatically confer higher symbolic status and prestige in the household or community. In this sense, it is unclear if financial exigencies would lead to a change in how the older persons are perceived. Qualitative data coming out of Agincourt, and other South African sites, suggest that while pensions are desired at the household-level, older persons are not necessarily regarded as having a higher social value due to their pension receipt (Bohman et al. 2007; Schatz 2007). It is clear, however, that pensioners do have a great utilitarian value to households because of the contributions that they can make, particularly in the absence of other income sources (Case and Deaton 1998; Case and Menendez 2007; Duflo 2003).

Conclusion

The significance of analyses in this paper is underscored by the ongoing policy discussions focused on responding to (1) improving the well being of the elderly and (2) supporting households affected by the HIV epidemic. Moreover, the National Institute on Aging has called for research to inform policy development in sub-Saharan Africa precisely due to the lack of information on how older persons are affected by the epidemic, and how they are responding to changes in their households and kin-networks. While the proportion of elderly in the population is still small in most African countries compared to Asia and Latin America, the role that the elderly play in families and households is critical in many ways, particularly in high HIV prevalence contexts such as South Africa. Indeed, in Agincourt, approximately one quarter of all households in the site is home to an older individual (Schatz, 2007). The increasing percentage of deaths and illnesses attributable to HIV/AIDS coupled with access to pensions amidst high unemployment make it essential that we understand older persons' positioning within households.

From a policy perspective, analysis such as this has relevance on a number of fronts. First, while the old age pension was originally established to enhance financial security for people who are no longer part of the labor force, it was not designed to support households hit hard by dramatically escalating unemployment or an HIV/AIDS epidemic of the proportion we are currently seeing. Therefore, little attention was paid to how these pensions would affect the households in which elderly lived and even less so to the ways they may affect older persons household roles, like assuming headship responsibilities. Put simply, the old age pension has been used in ways that its formulators never expected. Second, the HIV/AIDS epidemic is at a different stage in its maturation than it was when old age pensions came about. Originally thought of as a death sentence, HIV/AIDS is increasingly treated as a chronic condition, which clearly has important implications for the roles of the elderly as

caregivers. While ARTs may be able to keep their children alive longer, the elderly will continue to play an important role in the provision of practical and financial support. The access to pensions might well be even more important in such households where employment potential is further compromised by illness and death. In short, policy makers should consider how HIV is altering the expectations of the elderly in households. The increasing prominence of elderly as household heads should temper conventional assumptions about both intra-household and intergenerational allocation of resources that are often made by policy makers in setting limits and conditions on social grants. Finally, if gendered differences that emerge in this descriptive analysis hold up in more complex analyses, programs may need to bolster support differently for older women and men. Given the recent roll-out of antiretroviral drugs, further monitoring of the impact of morbidity and mortality of prime-aged adults and the roles older household members play, as well as tracking of the individual positioning of older members within households will continue to be crucial to understanding the progression of the epidemic.

The descriptive analysis presented in this paper is a critical first step in identifying the salient issues to address in future research. First, the gender differences that have emerged from this analysis should be explored more systematically in multivariate models. In particular, we need to establish what the relative contribution of gender is in determining elderly positioning in households controlling for age which is also a proxy for pension access. In other words, we need to disentangle what the gender variable actually captures and to what extent it reflects status and power, both of which can be proxied by household headship. Second, our analysis, based on cross-sectional data, underscores the need for longitudinal analysis of change in the roles of the elderly. To this extent, event history models can be used to determine the “risk” of attaining headship as a response to time varying factors such as an HIV related death and the access to pensions. Finally more focused analysis on households affected by HIV might yield important differences in the role of age and gender in influencing household composition and, in particular, the positioning of the elderly.

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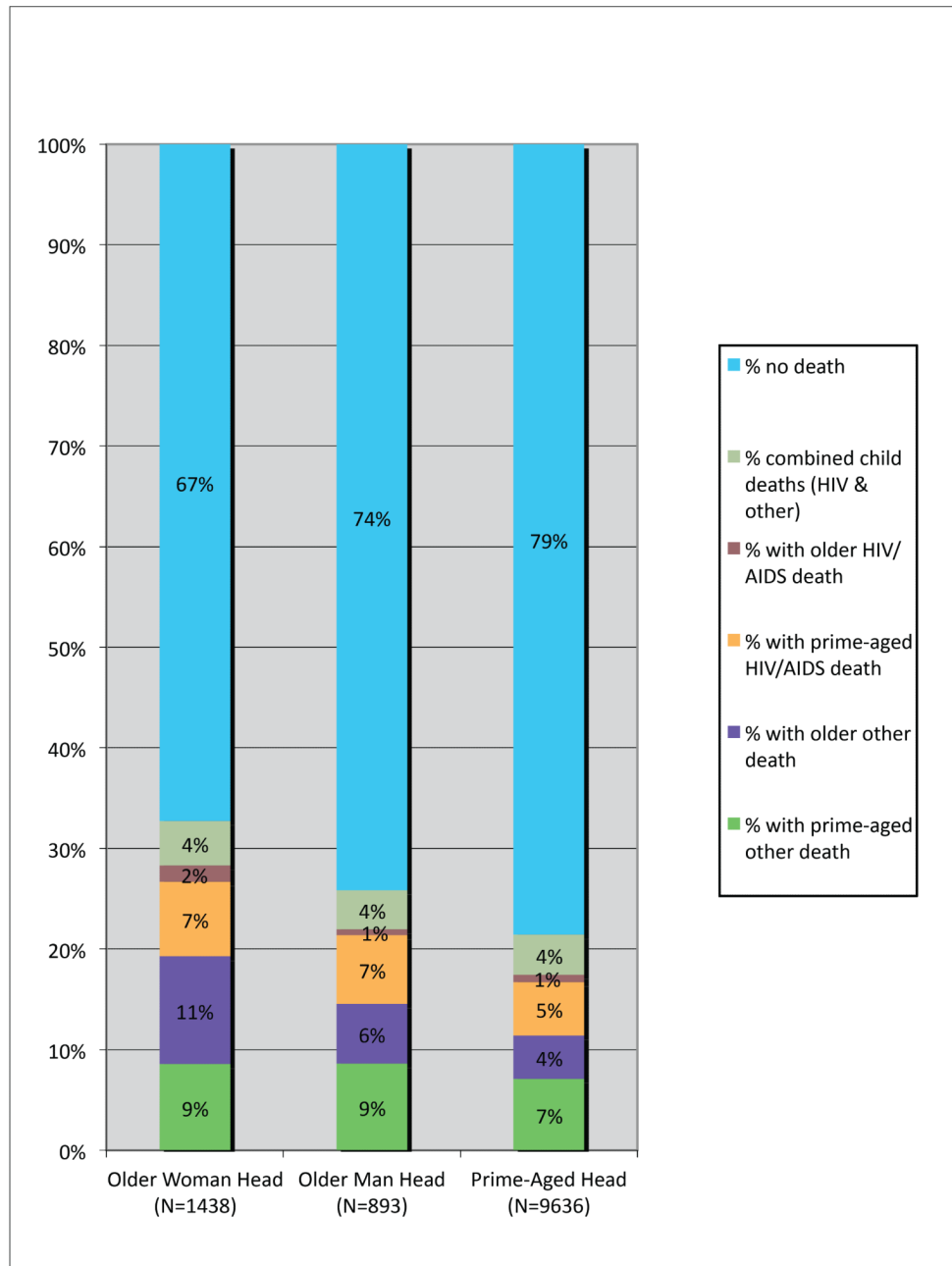


Figure I. Percent of households with a death across headship types in 2005

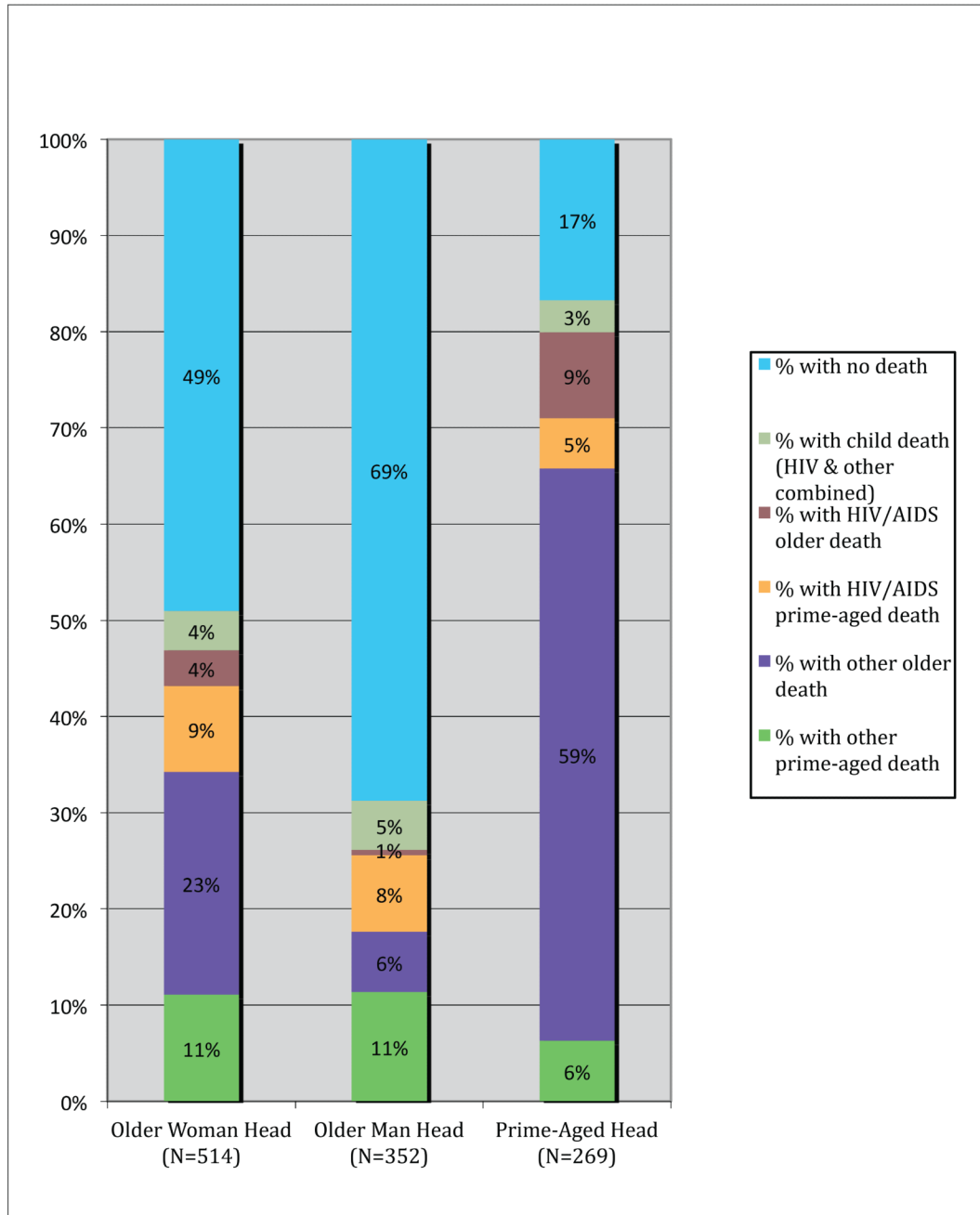


Figure II. Percent of deaths in households by headship type 2005, in households that changed headship type 2000-2005

Table I
Household characteristics by sex and age of heads (2000, 2005)

	2000				2005			
	Older Male Head 65+	Older Female Head 60+	Prime- aged Head	All HHs	Older Male Head 65+	Older Female Head 60+	Prime- aged Head	All HHs
Percentage of all households headed by each type	7.1%	10.0%			7.5%	12.0%		
Mean household size	7.3	6.0	6.0	6.1	7.4	5.9	5.7	5.9
Mean dependency ratio	1.49	1.27	.83	.92	1.30	1.16	.72	.82
Mean proportion female	.43	.64	.49	.50	.43	.63	.49	.50
Mean number children	2.4	2.1	2.5	2.4	2.1	1.8	2.1	2.1
Percentage with at least one orphaned child	1.3%	2.2%	2.2%	2.1%	1.1%	4.6%	6.3%	5.7%
Number of households	818	1154	9548	11524	904	1449	9724	12077

* Across household type in 2000: differences are significant at .001-level, except percent with at least one orphan, which is significant at .02-level.

** Across household types in 2005: all differences are significant at .001-level.

Table II
Change in headship types over period for extant households in 2000

	Headship type in 2005				Total
	Prime-aged head	Older man head 65+	Older woman head 60+	Dissolved	
Prime-aged head 2000	75% (7188)	4%* (345)	4%* (401)	17% (1618)	9552
Older man head 2000	13% (103)	61% (500)	14% (113)	12% (102)	818
Older woman head 2000	14% (166)	1% (7)	70% (812)	15% (169)	1154
Total	7457	852	1326	1889	11524

* Of those households where the head was prime-aged in 2000 and an older man in 2005, 71% were headed in 2000 by a man aged 60-64, 29% are households where the head changed between 2000 and 2005.

* Of those households where the head was prime-aged in 2000 and an older woman in 2005, 47% were headed in 2000 by a woman aged 55-59, 53% are households where the head changed between 2000 and 2005.