Headship of Older Persons in the Context of HIV/AIDS in Rural South Africa

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SHORT ABSTRACT (150 WORDS)

This paper examines older persons' living arrangements in the Agincourt sub-district of Mpumalanga Province, South Africa—an area with 32% HIV-prevalence. We examine the likelihood of an older person being the household-head across household-level death-status categories for deaths occurring in the 2000-2005 period. In addition, we investigate differences in older persons' transitioning into the household-head position over this 5-year period across households with an HIV/AIDS, other or no death over the period. Using cross-sections of the Agincourt Health and Demographic Surveillance System data, we conduct logistic regression analysis (1) at the household-level to assess the odds of a woman 60+ or a man 65+ being household-head in 2005 by household mortality experience (2000-05), and (2) at the individual-level to estimate the likelihood of an older person, who was not a household head in 2000, becoming household head by 2005, first by household mortality experience, then by cause of death.

LONG ABSTRACT

In this paper, we propose to examine the living arrangements of older persons in the context of HIV/AIDS in the Agincourt sub-district of Mpumalanga Province, South Africa. South Africa has an adult prevalence rate around 16% (UNAIDS 2007), while Mpumalanga Province has the second highest provincial prevalence rate in the country at approximately 32% (South African Department of Health [SADOH] 2007). Based on the South African pension classification, we define older persons as over 65 for men and over 60 for women.¹ Specifically we seek to determine (1) whether household headship by an older person depends on death status of the household -i.e. a comparison of households that have experienced an HIV/AIDS death with those that have had a death from another cause and those that have not had a death - in the previous 5 years, and (2) whether older persons are more likely to transition into the position of household head over a 5-year period in households in which an HIV/AIDS death occurred compared to those with a death from another cause or no death. In other words, we are interested in residential patterns across "death event" categories as well as change in individual positioning within households, e.g. a change from being the parent of the household head to being a household head, when a household has experienced a death during the period.

There have been some very real changes that have occurred in the Agincourt sub-district in the 1992-2003 period – smaller household size, increase in fostered and orphaned children, and increasing numbers of female-headed households – but they cannot be attributed to AIDS alone as other significant social, political and cultural changes have occurred in South Africa (Madhavan and Schatz 2007a). Despite older persons being a small proportion of the total population (about 6%), the Agincourt population is aging (Madhavan and Schatz 2007a). Additionally, the small overall population of older

¹ The age-eligibility for men will be reduced to 63 as of January 2009, and will be reduced further to match women's age-eligibility at 60 in the future. Since the data we analyze were collected prior to this change, we retain the earlier eligibility age of 65 for men.

persons does not appropriately describe their presence in Agincourt—approximately one quarter of all households in the site is home to an older individual (Schatz 2007). To date household level analyses on change in dependency ratio have shown that the effect of HIV/AIDS-mortality as differentiated from other causes disappears once the deceased sex, age and duration since death are included (Madhavan and Schatz 2007b). Similarly, in the qualitative papers emerging from the site, there were fewer differences across households with and without an HIV/AIDS death than the researchers expected to find. The permanence of poverty and intra-household connections to an HIV/AIDS death overshadow differences between households with and without a death (Schatz and Ogunmefun 2007). This being said, there has been a notable increase in the number of deaths due to HIV/AIDS in Agincourt from 10.5% of all deaths in 1997 to 21.9% of all deaths in 2003 (Madhavan & Schatz 2007a). The high rates of HIV-prevalence, increasing percentage of deaths attributable to HIV/AIDS, and the changing dynamics in household composition and structure emphasize the value in exploring older persons' positioning within households.

This paper will focus on household-headship as a way to understand older persons' position within the household in the context of HIV/AIDS. While the authors recognize that the meaning and measurement of headship can be contentious – due to (1) reporting issues, (2) culturally-constructed meanings of the role, and (3) debates about whether the role commutes status or obligation – the designation of household-head, in this context, is not completely arbitrary. In households in this area, there is an emic resonance of the concept that connects to roles and responsibilities in the household.

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 (Noumbissi 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. This latter point is corroborated by the fact that female household heads are more likely than non-household heads to be widowed, or divorced (Kinsella and Philips 2005; Ogunmefun 2008). In the Agincourt area there has been a significant increase in the average age of male household heads from 46 in 1993 to 48 in 2003. While there has not been a comparable increase in the average age of female heads, female heads have consistently been on average older than male heads; the average age of female heads has hovered around 52 over the same period. Furthermore, since female household heads are, on average, older than their male counterparts, the increase in the percentage of households headed by women from approximately one quarter of the households in the early 1990s to over a third in 2003 means that more households are being headed by older persons (Madhavan & Schatz 2007a). These descriptive statistics point to an interaction between age and gender in household headship patterns in Agincourt.

Other authors echo the need to explore household headship as a demographic variable that may help elucidate issues related to household composition and structure in high HIV-prevalence societies (Merli and Palloni 2004; Ferreira 2004). The trends in the Agincourt site of increasing percentage of households headed by older persons and

women are borne out in other contexts as well. Increases in older persons and women as household heads in sub-Saharan Africa often are associated with households losing members to the HIV/AIDS epidemic (HelpAgeInternational [HAI] 2004a, 2004b 2005; Ferreira 2004, Monasch and Boerma 2004). Using headship as a lens to examine the composition and structure of households, our analysis will contribute to a better understanding of older persons' position in households in the context of HIV/AIDS.

Data

In this analysis, we use the Agincourt Health and Demographic Surveillance System (AHDSS) 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. The province has an HIV-prevalence rate of 32% making it one of the worst areas in the country (SADOH 2007). 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. Intense mobility in and out of the site is a contributing factor to high HIV-prevalence. Clark et al. (2007) have shown that people come back to the Agincourt area to die after contracting and/or becoming sick with HIV/AIDS elsewhere. The population has low levels of education and high rates of unemployment. 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 anti-retroviral drugs are recently available in selected clinics.

The longitudinal AHDSS has collected data annually since 1992 in 21 villages (3 more villages were added in the 2007 update) with a population of approximately 70,000 people in 11,600 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. The VA is a structured interview conducted within one year of when the death is reported; it is administered to relatives or friends of the deceased. It covers symptoms of illness, duration of illness and treatment sought. Two trained physicians then independently examine the data to diagnose probable cause of death by assigning International Classification of Disease codes for main, intermediate and contributing causes. When there is disagreement, a third physician, who is blind to previous reviews, does an independent examination. Agreement with one of the other assessments is used as the basis of assigning a particular death classification. If there is no agreement among the three assessors, the case is classified as "undetermined" (Kahn et al. 2000). A recent validation against hospital records shows 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 likely underestimated with a number likely coded as undetermined.

The longitudinal AHDSS with its verbal autopsy data provide a unique opportunity in a developing country setting to track trends at the population, household and individual levels. The availability of household and individual level data at yearly intervals enables us to control for pre-existing conditions that undoubtedly condition the impact of HIV/AIDS mortality on household level processes and individual level changes.

Analytical Strategy

In this paper we examine older persons' headship in households over the period 2000-2005, using cross-sections of the AHDSS data. These analyses explore household- as well as individual-level differences in older persons' living arrangements across death status categories which are defined as households with (1) an HIV/AIDS-death during the period, (2) a death from another cause during the period, or (3) no death during the period. Only extant households in 2000/2005 are included.²

We begin with descriptive statistics at the household level, focusing on older persons' living arrangements in 2000 and 2005 by the three strata of households. The descriptive statistics include for each time period and strata the following measures across households: percent of households in the site with an older person, percent of households headed by an older woman, percent of households headed by an older man; and, the following measures within households: the proportion of households that are older, the traditional dependency ratio, and a new South Africa specific dependency ratio moving older persons into the "productive" category recognizing their access to pensions and thus productive/contributory role in the household.

We then employ household level regressions to examine whether households with an HIV/AIDS-death during the period are more likely than other types of households to be headed by an older person in 2005, controlling for household compositional features in both 2000 and 2005. The sample for these regressions includes the 9635 households extant during the 2000-2005 period.

Finally, we explore individual-level regressions to assess if older individuals are more likely to transition into the role of household head in households that had an HIV/AIDS-death compared to older individuals in households without an HIV/AIDS-death. The sample for these regressions include all women aged 60+ (N=3573) and all men aged 65+ (N=1492) in 2005. The dichotomous dependent variable is 1 for those who were not a head in 2000 but became head by 2005, and 0 for all other possible transitions (was head in 2000 but is no longer head, was not head in 2000 and is not head in 2005, was head in 2000 and is still head in 2005). An older person may transition into the role of household head in three ways, (1) being a household head under age 60 (women) or 65 (men) in 2000, and aging into the "older" category over the period, (2) being a regular household

 $^{^2}$ See Madhavan & Schatz 2008 for the reasoning behind limiting analysis to extant households, as well as a comparison of extant and dissolved households.

member in 2000 and becoming the head at some point over the period, or (3) not being in the household in 2000, in-migrating and becoming the head during the period. The head in 2000 may still be in the household or have out-migrated or died over the period. We recognize that in-migrants may move into the household in anticipation of the death or in response to it, in this analysis we are less interested in the timing of the move than in the older person's new status in 2005. We also will not be able to track whether or not the house from which an in-migrant comes had a death during the period; what we are interested in, however, are the deaths, processes, and dynamics in the destination household over the period. Thus, we control for the household compositional features of the household in 2000 for each household where an older person is living in 2005.

Preliminary analysis comparing households suggests gendered trends, with differences across the strata of households. For example, from 2000 to 2005 there were different trends in the presence of older men and women with increases in the percent of households with at least one older woman in the HIV/AIDS category, but a decrease the percent of HIV/AIDS-death households with an older man. While more HIV/AIDS-death households had an older woman present, in this stratum there was actually a decrease in the percent of HIV/AIDS-death households during the period. Despite decreases in the percent of HIV/AIDS-death households with an older man, there was an increase in the percent of HIV/AIDS-death households with an older man, there was an increase in the percentage of older male-headed-households in all three strata. Interestingly, there was not an increase over the period in the proportion elderly living in HIV/AIDS-death households, which contradicts one common hypothesis that older persons move into households where an HIV/AIDS-death has occurred in order to care for the remaining members. These initial findings point to gendered differences, as well as more complex trends than have been hypothesized elsewhere.

The significance of analyses in this paper is underscored by the ongoing debates about policy responses to the epidemic in South Africa. 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. In order to develop appropriate interventions aimed at assisting HIV/AIDS-affected older persons, we need to know the kinds of changes that are likely to occur in the households in which they live, and how those changes affect them. To begin with, it is still not clear to what extent an HIV/AIDS-death, as opposed to death from any other cause, has unique effects. This analysis will contribute to a better understanding of this phenomenon. Assuming HIV/AIDS-mortality does bring about a unique set of effects for older persons at the household level, in this case related to their roles as household heads, programs promoting assistance for older household heads caring for orphans or sick individuals may need to be strengthened. In addition, gendered differences may mean the need for programs to bolster support differently for older women and men. Given the recent rollout 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.

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