

Marriage Behavior Response to Prime-age Adult Mortality

Evidence from Malawi

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Introduction

A drastic increase in AIDS-related mortality of the prime-age adult population can change many aspects of household and individual behavior. The death of prime-age adults decreases household income and, thus, decreases investment in human capital for the next generation. For individuals, high prime-age adult mortality influences people's perceptions on potential risks in family formation such as finding a marriage partner. For example, in a society where the AIDS epidemic is prevalent, a possible behavioral change in the marriage market in response to an increase in prime-age adult mortality is to marry earlier to avoid their exposure to HIV. Since the marriage decision is key to the way a family is structured, current AIDS mortality risks can potentially have long-term impacts propagating to the next generation.

This study attempts to identify causal effects of AIDS mortality risks on marriage behavior among women, using the 2004 DHS data from Malawi. We hypothesize that an increase in prime-age adult mortality in the marriage market (correlated with the growth of the AIDS epidemic) leads to adopting safer behaviors among young women in the marriage market by marrying at a younger age, delaying first intercourse, and securing a younger partner. These behavioral changes reduce the probability of HIV infection during both singlehood and marriage.

Questioning Conventional Wisdom about Marriage Behavior

Verifying our hypothesis however is not an easy task, since in many countries, the mortality rate and marriage age are negatively correlated over time. Due to improved nutrition and medical science, mortality rates have decreased recently, partly contributing to the rapid population growth in developing countries. Marriage age, on the other hand, also had an upward trend in many countries, probably due to an increased opportunity cost for marriage as women are receiving more education along with economic development. Until recently, a negative correlation was observed between marriage age and mortality rate but data limitations precluded further examination of the relationship between HIV prevalence and marriage behaviors. The availability of the recent rounds of DHS surveys finally permits researchers to investigate this issue fully.

The DHS surveys are unique large databases for researchers who analyze the socioeconomic impacts of AIDS.

It includes rich information on marital status, current and past sexual behavior, including premarital and extramarital sexual activities, knowledge and attitude toward HIV and AIDS, and results of HIV testing for a subsample of respondents. For the purpose of our study, the birth and death records of respondents' siblings are particularly important. To examine the changes of marriage behavior arising from the AIDS epidemic, ideally, we should use information on the regional HIV prevalence in different periods. However, since there are not many surveillance sites collecting HIV test results in the country, it is difficult to investigate the regional differences and dynamic changes in the prevalence rate from aggregated statistics. The DHS survey can only provide the current estimates of the HIV prevalence rate. Therefore, our analysis uses prime-age adult mortality as a proxy for the HIV prevalence.

We employ the following empirical strategy. Using the retrospective death records of respondents' siblings, we calculate district-wise (average) prime-age adult mortality rates that each birth cohort has faced, and relate it to marriage behavior for each birth cohort. We use the district-wise age-specific mortality rate in the age 26-30 population as the reference for a prime-age adult mortality rate. Then we assume that women of age 11-15 observe the reference mortality rate (in the age 26-30 group) to form perceptions about HIV and AIDS risks in their adolescent period.

Results

The main finding was that excess prime-age adult mortality arising from AIDS in the local marriage market (district) lowers the marriage age for females and reduces their premarital sexual activities in Malawi. Marriage is still customary in Malawi; therefore it is not common to refuse marriage. Women tend to marry younger in an area experiencing a high HIV prevalence, in order to find a safer spouse. This runs counter to the global trend of rising marriage age for women. The AIDS epidemic has reversed this trend in Malawi and this is quite likely to be the case in other countries in Sub-Saharan Africa. Young women also have become more conservative in their sexual activity, delaying the age of first intercourse (thus shortening the premarital sexually active period).

These findings have further implications on human capital formation among women and for the next generations. First, early marriage means less schooling among young women, which may weaken their bargaining power

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in the household and consequently have negative outcomes on children. Second, a longer period of marriage may also imply an increase in fertility, which also has a negative outcome on child schooling through a so-called quantity-quality trade-off. Therefore, it is possible that AIDS-related excess mortality has negative effects on human capital formation among women and the next generations through changes in women's marriage behavior. The detailed investigation of the impact of women's early marriage on human capital formation is an issue to be tackled in the future.

Policy Implications

Our findings suggest that an increase in mortality among prime-age adults mainly due to the AIDS epidemic changes human behavior such as marriage decisions. Existing studies

also show that it has changed schooling investments, labor supply, consumption, and savings, etc. These results collectively imply that we need to incorporate these endogenous changes in human behavior into policy frameworks.

Changes in marriage behavior may also impact human capital formation in the next generation. We still do not know the magnitude of this impact from our study, but it implies that younger marriage may increase fertility rate and therefore reduce schooling investments in the next generation. Existing studies show that deaths of parents decreases schooling investments in their children through two channels: income loss and orphanhood. Our paper demonstrated that the reality is much more complex than the above story and the complexities should not be ignored by policymakers.



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About RENEWAL

Facilitated by the International Food Policy Research Institute, RENEWAL is a regional "network-of-networks" in Sub-Saharan Africa. Currently active in five "hub" countries (Malawi, Uganda, Zambia, South Africa, and Kenya), RENEWAL comprises national networks of food and nutrition-relevant organizations (public, private, and nongovernmental) together with partners in AIDS and public health research. RENEWAL aims to enhance understanding of the worsening interactions between HIV, food security, and nutrition, and facilitate a comprehensive response to these interactions. RENEWAL is grateful for support, at present, from Irish Aid, the Swedish International Development Cooperation Agency (SIDA), the International Development Research Centre (IDRC, Canada), and the United States Agency for International Development (USAID).

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