

The Impact of HIV/AIDS on Intra-Household Time Allocation in Rural Malawi

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Introduction

- The AIDS epidemic has its most significant impact at the household level, especially in countries where the major employment sector is agriculture (Zaba et al, 2004; Barnett et al, 2004)
- Few studies on the role of intra-household labor substitution as a coping mechanism for HIV/AIDS-specific illnesses and deaths

Gendered division of labor

- Allocation of agricultural tasks is gendered
- Men spend time engaged in cash crop activities
- Women are primarily responsible for subsistence agriculture
- Gender differences may appear in hiring practices of farming estates
- Kinship patterns differ: the north is patrilineal and the south is matrilineal – affects land access

Data

Quantitative data

- Data source:** 2004 Malawi Diffusion and Ideational Change Project
 - Time use diary + HIV status
- Selected sample:** 1436 adults aged 15-70 years (516 males and 920 females)
 - married women (801)
 - married men (516)
 - separated, divorced or widowed women (119)

Context: farming patterns

- 90% of the total workforce in Malawi is involved in the agricultural sector
- Maize = primary source of food + largest agricultural production
- Farming cycle begins Sept-Oct and ends in May
- For the winter months vegetable growing and land preparation are the dominant activities

Qualitative data

- Interviews with 18 households in Southern and Central districts carried out between June-August 2005
- The study sought to understand negative socioeconomic shocks (including ill health and death) and their social outcomes (including changes in livelihoods, family disruption and relations within extended kin networks).

Descriptive statistics

- 95% of households are male-headed
- Agriculture is the main occupation: approximately half of the sample had farmed during the most recent workday
- Few households employ any farm inputs besides unpaid family labor of resident members
- Only one-fifth of all respondents reported non-agricultural work (e.g. small enterprise activities)
- Women are primarily responsible for all domestic work

Methods

The time use model

- Time allocation model that incorporates household morbidity and mortality:

$$T_i = \beta_0 + \beta_1 R_i + \beta_2 X_i + \beta_3 P_i + \beta_4 L_i + \beta_5 D_i + \beta_6 M_i + J_i + \epsilon_i$$
- 3 models were estimated:
 - Morbidity
 - Morbidity
 - Mortality + Morbidity

Results

Multivariate analysis: Women

DAILY HOURS	Model 1	Model 2	Model 3
Farming	—	—	—
HIV status	—	-3.03**	-2.99**
HIV nonmember sick	—	.50*	.50*
Non-agricultural work	—	—	—
Adult death	4.00**	—	4.01**
H sick x W sick	—	6.18*	7.35**
Domestic	—	—	—
HIV status	—	-1.05*	-1.06*

Qualitative results

- Impact of morbidity and mortality on children's time use
- Effect of husband's illness and death on time allocation of widows
- Income diversification as a coping strategy

Children's time use

Silaby Swaha's story (17 years of age)

- Interviewer: What happened for you not to go further with your education?
- Subey: In the year 2000... oh no the year 2001... When my father broke his hand. And looking at the household work it was difficult because mom could not manage. And that's when I dropped from school by attend to the household chores. And when I was done with the household chores and decided to go back to school my teacher said that I am to go back and continue with the work. This is how I stopped going back to school.
- Interviewer: The time that your late father was ailing, where did you get aid from?
- Subey: That all the assistance came from us his children so the time he died, I just sold some tobacco so that the funeral service would be carried out and that was done by the two of us only.
- Interviewer: Your mom told me you were buying medicine for your dad. Tell me, where did you get the money?
- Subey: When we found that there was a need the two of us could agree and plan so we could do casual labor and we would get say K100 [K1].

Time use and widows

Felicity Swaha's husband died in 2004

- Felicity: Now it happened that the owner got sick. We sold the tobacco earlier to the vendors so that we could assist the one who was sick. So we did not get any profit, the money was used anyhow because of the sickness and death.
- Interviewer: So what are some of the things you on your own are now taking care of?
- Felicity: Constructing a maize granary, buying fertilizer even... because I had to find the money and most of the men's work is hard for me to do.
- Interviewer: I do certain gain (business) so that I can be helped. What type of gain do you do?
- Felicity: I sell bananas fritters.
- Interviewer: Business fritter, where do you sell them?
- Felicity: At the market.
- Interviewer: Oh, now, this business, how is it helping you?
- Felicity: It is helping me here and there, some necessary things.

Conclusions

- It is important to incorporate data on morbidity as well as mortality into research on time use and labor substitution
- The primary impact of HIV/AIDS morbidity and mortality at the household level is to induce diversification of income sources, with women reallocating their time from physically strenuous activities (farming and heavy chores) to cash-generating activities (casual labor or small enterprise)
- Men's allocation of time is unresponsive to the same shocks
- There is also an impact on time use patterns of children

