Men's Labor Migration and Women's Informal Communication on HIV/AIDS in Mozambique

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Abstract

This study employs social capital perspectives to examine men's labor migration and informal communication about HIV/AIDS of wives who stay behind in southern Mozambique. We compare three groups; women whose husbands were current labor migrants, those whose husbands have been away for sometime and those who were married to non-migrants. Using multi-level random intercept models, we find that women married to current migrants were more likely than those whose husbands have been away and non-migrants' wives to converse about HIV/AIDS. Such communication was likely to occur with social network partners whose husbands have also migrated. We also find that women who are very worried about getting HIV/AIDS infection from their husbands are more likely to engage in conversations about HIV/AIDS. We analyze qualitative data collected in parallel with the survey and interpret our findings within the context of labor migration and the social construction of HIV/AIDS risk and prevention in sub-Saharan Africa.

Introduction

This paper examines the relationship between men's labor migration and the informal communication about HIV/AIDS of their wives who stay behind in southern Mozambique. We employ a social capital perspective to compare the dynamics, content and characteristics of such communication among women whose husbands were current labor migrants, women whose husbands have been away over an accumulated period (but may have returned) and women who were married to non-migrants.

Sociological literature on HIV/AIDS reserves a place for the impact of informal communication on individual risk perception and the acquisition of information on effective strategies to reduce infection (Agadjanian, 2002; Agadjanian & Menjívar, 2008; Behrman, Kohler & Watkins, 2003, Smith & Watkins, 2005). This literature has established that communication about health matters in general and HIV/AIDS in particular are essential to

mechanisms of behavior change (Catania, Kegeles & Coates, 1990; Roesenstock, Strecher & Becker, 1994) and to securing the social support needed to prevent and manage illness (Faulkin & Strauss, 2000). Central to this body of literature is the finding that women and men perceive potential risk of infection and stigma differently and share information about prevention strategies in gendered individual communication networks (Smith & Watkins, 2005; Anderson & Doyal, 2004; Agadjanian, 2002). For example in Malawi, while women often worry and talk about their husbands as possible sources of infection and may resort to divorce as a prevention strategy, men mainly worry and talk about their extramarital relationships and adopt fewer and more careful selection of partners as strategies for prevention (Smith & Watkins, 2005). However, little is known within this literature about the dynamics of men's migration and it impact on the form and content of informal communication about HIV/AIDS among wives who stay behind.

Similarly, a growing body of literature has accumulated evidence that indirectly link migration (forced and voluntary) to the AIDS epidemic (Anarfi, 1993; Decosas et al., 1997; Lurie et al., 2002; Bummer, 2002). People who are more mobile or frequently change residence are at a higher risk of HIV infection and other sexually transmitted diseases (STDs) than people in more stable living conditions (Lurie et al., 2002). This is especially so in Southern Africa where the roots of labor migration to South Africa from neighboring countries such as Mozambique run deep. Much of this literature has focused on migrant vulnerability in place of destination and a few other studies have examined the vulnerability of migrants' partners in the areas from which migrants come (Lurie, 2000). Yet neither of these types of studies incorporates informal HIV/AIDS communication based on the increased reproductive health vulnerability of wives who remain behind.

Thus combining these two bodies of literature-that on informal communication about HIV/AIDS and that on migration and HIV/AIDS-, our study uses survey data in southern Mozambique to examine the content and dynamics of husbands' migration on wives' informal communication about HIV/AIDS. Specifically, the study aims to (1) compare the likelihood of informal communication on HIV/AIDS among three groups of women: those whose husbands are current migrants, those whose husbands have been away for an accumulated period prior to the survey (some of whom might have returned) and those whose husbands did not migrant (2) the nature and characteristics that influence such communication and (3) the association between risk perception and informal communication on HIV/AIDS. Studies of this nature are essential if targeted interventions on preventing and treating HIV/AIDS are to be successfully implemented.

Conceptual Framework

To provide a framework to conceptualize the association between men's migration and women's informal communication about HIV/AIDS, we draw on the social capital perspective. Social capital has been defined and used differently by various scholars (Bourdieu, 1986; Coleman, 1988; Putnam, Loenardi & Nanetti, 1993; Nan Lin, 2001). Broadly it refers to "the system of networks, norms, and trust relationships that enable communities to address common concerns" (Pronyk, 2008:1560); Coleman, 1988; Putnam et al., 1993). For example, Coleman (1988) emphasizes that social capital inheres in relations of trust and corporation between individuals in a group and not in the individual themselves. Nan Lin (2001) also argues that social capital by virtue of an individual's connections, works by both exerting influence on group members and facilitating the flow of information. These processes are bound by the dual nature of social capital-bonding and bridging, with the former binding together homogenous groups and the latter interconnecting heterogeneous groups (Putnam, 2000).

More specifically, our conceptualization of migration and informal communication about HIV/AIDS is rooted in the literature linking social capital to better health and lower HIV risk at the individual level (Gregson, Terceira, Mushati, Nyamukapa, & Nystedt, 2003; Szreter, & Woolcock, 2004). These studies have typically shown positive associations between investment in social capital and better mental health, lower risk of smoking and lower HIV risk. First it is conceptualized that given the social vulnerability of women whose husbands' have currently migrated and their relatively less access to resources and forms of other social capital, membership in informal social networks and communication about HIV/AIDS in these networks will provide current migrant wives with an avenue to seek social support and information on HIV/AIDS prevention. Thus vulnerability and insecurities created by current migration of husband creates tightly knit personal networks that bond members together.

Second, social capital mechanisms may operate differently for women whose husbands have been away for some time (and may have returned). Such women may rely less on individual social networks for information and prevention strategies because of greater independence and autonomy and may rely more on other forms of social support garnered through institutions (employment outside the household) and new roles and responsibilities. These kinds of social capital may not be influenced by the return of migrant husbands. Thus through these mechanisms, social relationships of women whose husbands have migrated for sometime are expected to be larger and more diverse but less cohesive, thereby pointing to bridging rather than bonding effects.

Thirdly, wives of non-migrant men, may not experience similar social vulnerabilities compared to wives' of current migrants and may have access to other social capital and resources

that does not predispose them to frequent and tightly knit network ties as described for women whose husbands are currently away.

Using this conceptualization, we hypothesize that wives whose husbands are currently away will be more likely to have conversations about HIV/AIDS than wives whose husbands have been away for an accumulated period (and may have returned) and wives whose husbands have not migrated.

Lastly, in line with the literature on perceived risk as a prerequisite for behavior change (Ajzen & Fishbein, 1980; Weinstein & Nicolich, 1993), we conceptualize that perceived risk of infection from husbands will be associated with wives informal communication about HIV/AIDS. It is thus plausible to assume that the absence of perceived risk of infection may imply the adoption of behaviors to reduce such risk (Smith and Watkins 2005).

Setting

Data for this study comes from a survey conducted in Mozambique, a country in southeast Africa with a population of some 20 million. Mozambique like its southern African neighbors is located in the continent's "AIDS belt". The country has about 12.5 percent HIV prevalence rate (PRB 2009)-very high by international standards but lower than most of its neighbors. Previous projections from other sources have been as high as 16 percent (GTM 2005). In southern Mozambique, where this study is situated, HIV prevalence was estimated at 20 percent (GTM 2005) and has been rising rapidly due to large scale circular labor migration to South Africa and intensive internal labor migration.

Labor migration from rural areas to the mines and other destinations in South Africa has been a defining feature of the rural economy in Mozambique since the colonial and post colonial era (CEA/UEM 1997; Crush et al. 1991; First 1983). The post-colonial era has also witnessed

steady increases in migration to Mozambique's urban areas, especially during the period of civil war (the end of 1970s-1992). Structural adjustment policies introduced since the late 1980s have worsened the already precarious subsistence economy and magnified socio-economic imbalances. At the same time, prior restrictions on travel to South Africa and within Mozambique were lifted. These developments led to increases in migratory flows both internationally and domestically.

Data

We use data collected in southern Mozambique in 2006 by a team of researchers from the centre for African Studies at Eduardo Mondlane University in Mozambique. A probability survey was drawn among women aged 18-40 and residing in 56 villages of four districts in southern Mozambique. In each district, 14 villages were selected with probability proportional to size. In each selected village, all households with at least one married woman were canvassed and separated into list: those with at least one woman married to a migrant and those without such women. These two lists were used as sampling frames; from each list, 15 households were randomly selected. In each selected household a woman was interviewed (in households classified as migrant, a woman married to a migrant was interviewed). This procedure yielded a total sample of 1680 women (420 per district, 30 per village). The sample was more or less evenly split between women married to migrants and women married to non-migrants.

The survey instrument was administered in Tsonga or in Portuguese, Mozambique's official language and covered respondents sociodemographic characteristics, pregnancy history, husband's migration history (starting in 2000, the year of the particularly devastating floods in southern Mozambique), and household material status as well as information on AIDS awareness and prevention and gender attitudes. One of the modules of the survey questionnaire was devoted

to respondent's social interaction with individual network partners. The respondent was asked to name at least three people with whom he or she interacts frequently, whether a relative or not a woman or a man, people who live nearby or far away except spouses and children. Detailed information was then gathered from respondents who named at least one network partner. Additional questions asked included respondent's relationship with each network partner and other socio-demographic characteristics such as gender, community of residence, educational level, religion and about HIV/AIDS-related conversations and other health conversations they might have had with their network partner(s) in the recent past. It is from these questions we construct measures of informal communication and network characteristics for this study.

Measures

Dependent Variable: Ever talked about AIDS with network partner. The question that was used to construct the dependent outcome was "Was AIDS ever mentioned in your conversation with [Name], even if briefly?" This question emphasized that a brief mention of AIDS should be reported and recorded. Even though the question did not specify a time period of such conversations, it is likely that such conversations occurred in the recent past. The dependent outcome was operationalised as a dichotomy.

Independent Variable: Male labor migration. We measure both the woman's cumulative and current experience with male labor migration. Current male labor migration is a dichotomous variable that was coded 1 if the woman's husband is currently a labor migrant and 0 if otherwise. Cumulative male labor migration is the number of years, in the period from 2000-2006 (six years prior to the survey) that the man has been away for employment. This measure varies from 0 to six and is used linearly. We note that some husbands may not currently be labor migrants, but have prior experience working away in the past six years.

Control Variables: We use standard socio-economic variables associated with the respondent such as gender, age, number of kids alive, education, employment, polygyny, religion, marital status and material possessions. The models also control for respondent's primary network partner's demographic and socio-economic characteristics such as age (defined relative to respondent's age; older, younger or about the same age), marital status (currently in union or not), relationship to network partner (kin or non-kin), religion of network partner (also defined relative to respondent; same religion or different religion) and lastly, we included a predictor to measure the level of worry of the respondent about the possibility of contracting the AIDS virus from her husband. This was coded as a dichotomous variable. 1 represented women who were very worried and 0 represented those who were a little worried and not worried.

Methods

We use logistic regression to fit models for our outcome since it is coded as a dichotomous measure. We also examine conversations between respondent (ego) and reported core network partner. The dyad ego-network partner is thus the unit of analysis. In the case in which one network partner is reported, only one case is contributed to the model, whereas a case in which three partners are named contributes three cases. Respondents who mentioned no network partner were excluded from the analysis. While this technique allows us to use data more effectively by examining the entire set of dyadic interactions, it also creates a problem of within respondent clustering of interactions, as interaction partners of the same respondent may share some unobserved characteristics. We thus employ a random intercept model that allows the intercept to vary randomly by respondent to account for the possible correlation between the set of network partners of the same respondent.

Similarly, the sampling design is clustered and will not yield unbiased estimates due to the non-independence of women in the same village. To solve this, we introduce another random intercept to account for clustering within villages. Thus our multi-level random intercept models are fitted using the Glimmix procedure in SAS.

Preliminary Results

Table 1 below shows coefficients of multi-level random intercept models estimating the likelihood of wives informal communication on HIV/AIDS by husband's current and cumulative labor migration. The baseline model indicates that the odds of HIV/AIDS communication of women married to current migrants are 1.56 times that of women married to non-migrants ($\exp^{0.443}$=1.557). The coefficient for husband's cumulative number of years away is not statistically significant. In model two, where we add respondent's socio-demographic chacteristics and network partner's characteristics, the coefficient for women whose partners are currently away increases slightly in magnitude and remains statistically significant. In that model, the odds of conversation about HIV/AIDS of women whose husbands have currently migrated are nearly 2 times ($\exp^{0.6430}$=1.902) those among wives of non-migrants. Similar to the baseline model the co-efficient for husband's cumulative time away is negative and not significant. These results lends some preliminary evidence to our hypotheses that wives whose husbands are currently away will be more likely to have conversations about HIV/AIDS than wives whose husbands have not migrated and wives whose husbands have been away for an accumulated period (and may have returned).

The model also shows that such conversations are likely among network partners who are also married to migrants. Other network characteristics such as age, religion of network partner and relationship to network partner are not significant predictors of conversations about

HIV/AIDS. However, wives characteristics such as age, education, employment and religion (those from Zionist and other Pentecostal churches) are positive and statistically significant predictors of conversations about HIV/AIDS.

Also, we find that women who are very worried about contracting HIV from their husbands are significantly more likely to engage in conversations about HIV/AIDS. The magnitude of this effect is substantial: the odds of such risk perception among women are more than 2.5 times ($\exp^{0.955}$) those of women who perceive no risk. This confirms our hypotheses concerning risk perception and conversation about HIV/AIDS.

Next Steps

Pursuing our hypotheses further, we intend to examine interactions between risk perceptions and migration in order to establish how wives perceived risk of infection from husbands of current migrants and from migrants who have been away for some time as well as non-migrants affects communication about HIV/AIDS. This will allow us to examine further how risk perception plays a role in the social capital mechanisms outlined in our conceptual model.

To complement the survey data explored in our preliminary analysis and to interrogate our results further, we intend to use qualitative data consisting of 72 in-depth interviews of migrants wives to explore the content of AIDS related communication. This will give our paper the depth it requires to adequately interpret the dynamics of labor migration and the social construction of HIV/AIDS risk and prevention in sub-Saharan Africa.

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Table 1: Multi-level random intercept regression coefficients of husbands labor migration status and wives HIV/AIDS related communication

	Model 1		Model 2		
	Coef.	**SE**	**Coef.**	**SE**	
Husband's Migration					
Currently away	0.443	0.174 *	0.643	0.610	*
Cumulated years away	0.015	0.029	-0.006	0.191	
Ego Characteristics					
Age (in numbers)			0.039	0.016	*
Number of living children			0.010	0.050	
Wife has 1-4 years of education (ref=no education)			0.320	0.194	
Wife has 5+ years of education (ref=no education)			0.981	0.239	**
Currently working			0.707	0.199	**
In polygynous union			0.208	0.201	
Co-resides with in-laws			0.048	0.172	
Material Possession Index			0.011	0.091	
Thatched roof (Zinc, "lusolite", or block roof)			-0.007	0.179	
HH Owns cattle			0.111	0.181	
Main church			0.247	0.284	
Zoinist/other Pentecostal			0.495	0.245	*
Network Partner's Characteristics (relative to ego)					
Kin (not kin)			-0.121	0.145	
Older than ego (same age as ego)			0.066	0.177	
Younger than ego			0.112	0.194	
Same religion as ego			0.016	0.145	
Network Partner would loan money			0.187	0.197	
Network partner married to migrant			0.461	0.175	*
Network partner works			0.218	0.209	
Very worried about getting HIV from husband (ref=not very worried/not worried)			0.955	0.199	**
Number of Observation			3246	3246	