The Malawi Longitudinal Study of Families and Health

Newsletter 2016-3:

Migration and Health in Malawi: 2006–2020

Penn University of Pennsylvania

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MLSFH Project Description

The ***Malawi Longitudinal Study of Families and Health (MLSFH)*** is one of very few long-standing publicly-available longitudinal cohort studies in sub-Saharan Africa (SSA). With data collection rounds for up to 4,000 individuals in 1998, 2001, 2004, 2006, 2008, 2010, 2012+13, and forthcoming until 2020, the MLSFH documents more than two decades of demographic, socioeconomic and health conditions in one of the world's poorest countries. The MLSFH public-use data can be requested on the project website http://www.malawi.pop.upenn.edu. A ***MLSFH Cohort Profile*** in the *International Journal of Epidemiology* provides detailed project information, and a review of MLSFH research and data quality. Pending funding by U.S. National Institutes of Health will provide a continuation through 2020, focusing on research questions related to ***Surviving the Epidemic*** (STE).

Migration and Health in Malawi: Project Goals

¶ The ***Migration and Health in Malawi Project*** (MHM) focuses on a key challenge in migration research: although it has long been established that migration and health are closely linked, identifying the effect of migration on various health outcomes is complicated by methodological challenges. To address this challenge, the MHM Study was designed to measure and control for important characteristics that affect both migration and health outcomes. To achieve these goals, the MHM builds from the ***Malawi Longitudinal Study of Families and Health (MLSFH)***, one of very few long-standing publicly-available longitudinal cohort studies in sub-Saharan Africa (SSA).

¶ The MHM provides one of the first population-based longitudinal datasets on migration and health in SSA. These data are the first to include extensive information on health status, HIV infection, sexual behavior, remittances and transfers, migration history, and social networks for migrants and non-migrants; including measures both before and after migration (at post-migration locations). The MHM data include men and women across a broad age range (aged 15–90).

¶ Research goals of the MHM include: (1) identifying the selection of individuals with differing health status into migration in Malawi ("migration selection"); (2) estimating the causal effect of migration on mental and physical health status ("migration effect of health") by using longitudinal data from before and after migration and employing statistical approaches that control for unobserved determinants of migration and health; (3) examining the possibility that migrants of relatively worse health are more likely to return to pre-migration origins ("salmon bias"), and (4) measuring several key aspects of migration and health in SSA that have previously been neglected in sub-Saharan Africa, including (a) spatial direction (rural-urban, rural-rural), (b) reason for migration (e.g. work, marital change, death of family member), (c) duration of migration, (d) gender, (e) and distance from origin.

¶ An ***MHM Cohort Profile***, providing additional information about the study and its key findings, is available as Penn PSC Working Paper 15-4 at http://repository.upenn.edu/psc_working_papers/62.

¶ A continuation of the MHM until 2020 will be conducted as part of the MLSFH research on Surviving the Epidemic.

Migration and Health in Malawi: Approach

¶ The Migration and Health in Malawi (MHM) is based on the MLSFH, a longitudinal panel survey where the most common reason for non-interview is migration; the MHM sample includes MLSFH migrants. The MHM has conducted two waves of data collection to date, in 2007 (MHM 1) and 2013 (MHM 2): those eligible for the MHM 1

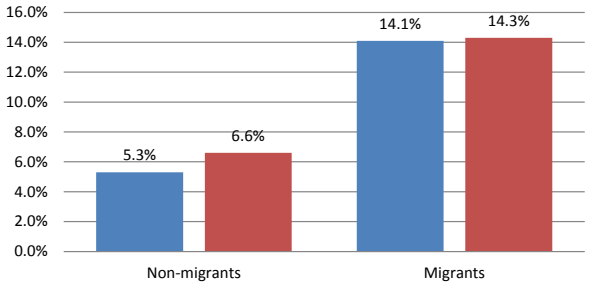
study were the 4,950 respondents in the 2006 MLSFH target sample, and the 5,914 individuals MLSFH 2010 respondents were eligible for the MHM 2. Among those eligible, the first wave identified 715 individuals who were previously interviewed by MLSFH and moved elsewhere within Malawi during MLSFH data collection in 2006. During 2010 MLSFH data collection, the second wave similarly identified 1,013 internal migrants.

¶ Despite challenges in finding highly-mobile individuals in a low-income country setting, the MHM traced and re-interviewed the majority of these internal migrants: 398 of 715 migrants in 2007 (55.7%) and 722 of 1,013 in 2013 (71.3%). The MHM also interviewed 80.4% (604) of the non-migrant reference group in 2013. A comparison of characteristics between migrants interviewed and those not interviewed shows few significant differences, meaning that the MHM data is generally representative of MLSFH migrants.

Migration and Health in Malawi: Results

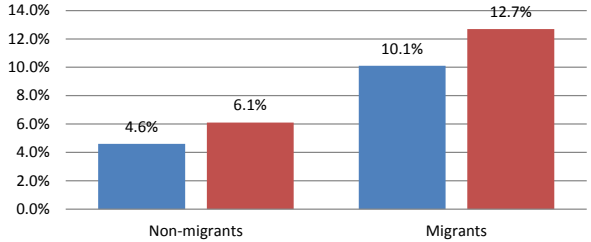
¶ The MHM was designed to examine the relationship between migration and HIV infection. As elsewhere, the MHM found that there is a strong association between migration and HIV infection in Malawi, in which migrants have significantly higher HIV prevalence than non-migrants.

HIV prevalence by migration status after migration, MHM 1 (blue) and MHM 2 (red)



¶ Contrary to a common assumption that migration is an independent risk factor for HIV infection, the MHM instead found that the higher prevalence of HIV among migrants is primarily due to the selection of HIV positive individuals into migration streams, rather than the effect of migration on HIV infection: migrants have significantly higher HIV prevalence than non-migrants ***before migration*** in both MHM 1 and MHM 2.

HIV prevalence by migration status before Migration, MHM 1 (blue) and MHM 2 (red)



¶ The selection of HIV positive individuals into migration streams appears due to the connection between marriage, HIV status and migration in Malawi, in which HIV positive individuals are more likely to experience marital dissolution and subsequently move.

¶ Where do these HIV positive individuals move? HIV-positive status has a profound impact on mobility: being HIV positive significantly increases the relative risk that respondent will be a rural–urban migrant, rural–town migrant, and a rural–rural migrant, instead of a nonmigrant. Being HIV positive significantly increases the relative risk that a respondent will move and return to the village of origin, and become a permanent migrant, instead of not migrating.

¶ Analyses of the relationship between migration and mental and physical health show that, as in other settings, physically healthier individuals are more likely to migrate. However, we also find that HIV status moderates the relationship between migration and health for men and women.

¶ Where do rural Malawians move? Most moves are intra-rural: in 2013, 65% of all migrants moved to another rural area, 23% of migrants moved to a district capital, and 12% moved to one of Malawi's three regional capitals, Lilongwe, Blantyre or Mzuzu. Return migration was common: 26% of 2010 migrants returned to MLSFH villages of origin by 2013.

MLSFH Project Website

http://www.malawi.pop.upenn.edu

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Contact Information

The MHM is conducted by Tulane University School of Public Health, the Population Studies Center at the University of Pennsylvania, in collaboration with the College of Medicine at the University of Malawi and Invest in Knowledge in Zomba, Malawi. Key contact persons for the MHM project are:

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Additional members of the ***MLSFH Study Team*** are listed on the MLSFH Website.

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