

The Malawi Longitudinal Study of Families and Health

Newsletter 2013-2:
MLSFH Key Findings
2007–13



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 a sub-Saharan African (SSA) context. With data collection rounds in 1998, 2001, 2004, 2006, 2008, 2010 and 2012 for up to 4,000 individuals, the MLSFH permits researchers to investigate the multiple influences that contribute to HIV risks in sexual partnerships, the variety of ways that people manage risk within and outside of marriage, the possible effects of HIV prevention policies and programs, and the mechanisms through which poor rural individuals and families cope with the impacts of high morbidity and mortality that are often—but not always—related to HIV/AIDS. The *MLSFH Cohort Profile*, available as PSC Working Paper 2013-06 (http://repository.upenn.edu/psc_working_papers/46), provides an up-to-date review of MLSFH research and gives detailed information about the sampling for the MLSFH, the changes of the MLSFH sample over time, and the procedures for HIV testing and counseling that were implemented as part of the MLSFH. It also reports comparisons of the MLSFH study populations with nationally representative datasets, analyses of attrition in the MLSFH sample, and it includes discussions of some specific features of the MLSFH data that have been widely used across many MLSFH-based papers.

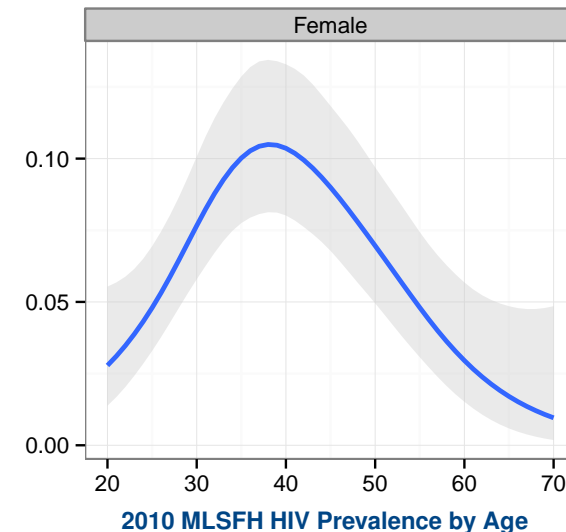
Key MLSFH Findings

Key MLSFH Findings of the current grant period 2007–13 include:

HIV prevalence and incidence

¶ The MLSFH documents 50 HIV incident cases during 2004–08, 45 of which occurred among MLSFH respondents aged 25–49 in 2006. The HIV incidence rate observed among MLSFH respondents during 2004–08 was 0.63 per 100 person years, and was higher among women than men.

¶ 5.4% of 2010 MLSFH respondents are HIV-positive (6.4% among women, 4.0% among men), and HIV prevalence varies strongly with age.



Social networks and transfers

¶ Social networks exerted systematic and strong influences on HIV risk perceptions and the probability of spousal communication about HIV/AIDS risks. Social networks also amplified program efforts aimed at increasing individuals' information about HIV/AIDS and their assessments of their own risks as well as the risk they face from their spouses.

¶ Individuals' interest in learning their HIV status was importantly influenced by peer influences and social networks, with respondents whose neighbors participated in MLSFH HIV testing and counseling being significantly more likely to learn their HIV status than respondents whose neighbors did not learn their HIV status.

¶ Financial and non-financial transfers occurring in familial social networks have been an important resource for individuals and families to ameliorate the implications of the HIV/AIDS epidemic; but intergenerational wealth flows did not always differ by kinship systems (matriliny or patriline), nor were they generally related to health status.

HIV Risks and Risk Perceptions

¶ In the absence of access to HIV testing and counseling, rural Malawians overestimates of their own likelihood of current HIV infection. Elevated subjective HIV infection risks were significantly associated with the behaviors that were perceived as being most risky in terms of HIV infection.

¶ Respondents substantially overestimated their mortality risks, and this pessimism about their survival lead individuals to underestimate the benefits of adopting HIV risk-reduction strategies. The arrival of antiretroviral treatment (ART) services in the MLSFH study regions seems to have reduced subjective mortality risks, including among HIV-negative individuals who have not directly benefited from ART.

¶ A MLSFH conditional cash transfer program that offered financial incentives to men and women to maintain their HIV status for approximately one year (with rewards ranging from zero to approximately 4 months wages) found no effects of the offered incentives on HIV status or on reported sexual behavior.

¶ Although sexual behavior generally declined with age, there were considerable levels of sexual activity and HIV infection risks among older Malawians; hence, older persons are highly relevant to studies of sexual behavior and HIV risk as ART improves the health and expands the life expectancy of HIV-positive individuals.

Consequences of HIV testing and counseling

¶ HIV-positive individuals who learned their HIV test results during the 2004 MLSFH were three times more likely to purchase condoms two months later than sexually-active HIV-positive individuals who did not learn their results.

¶ Respondents who received an HIV-negative test result in 2004 reported higher and less accurate subjective expectations about being HIV-positive after two years. HIV-positive individuals who learned their status reported having fewer partners and having used condoms more often during 2004–06 than those who did not learn their status.

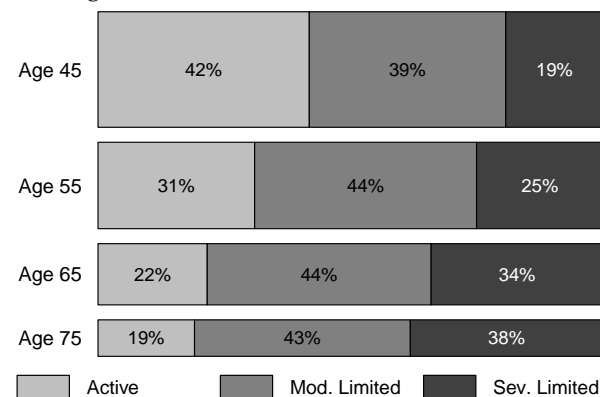
Health and mortality

¶ Mortality levels among MLSFH respondents have been shown to be similar to that of the Malawi population, including mortality differences by gender, region and HIV status.

¶ Only few MLSFH respondents had biomarker values for total cholesterol, LDL, HDL, albumin, creatinine and wr-CRP in the critical ranges as defined by developed country standards; these biomarkers exhibited also only very modest associations with socioeconomic status.

¶ Physical and mental health declines rapidly with age in rural Malawi. At older ages, chronic and disabling conditions are common, leading to significant levels of functional limitations in day-to-day activities and a substantial gap between potential and actual economic productivity.

¶ 45-year old women in Malawi can expect to spend 58% of their remaining 28 years of life with functional limitations, while 45-year old men can expect to live 41% of their remaining 25.4 years subject to such limitations. The fraction of remaining life spent with disabilities increases strongly with age for both men and women.



Distribution of life expectancy by disability state

Further information and sources

MLSFH Cohort Profile, available as PSC Working Paper 2013-06 (http://repository.upenn.edu/psc_working_papers/46).

Project Website

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

Online access to MLSFH micro-data, newsletters, working papers and project documentation. A MLSFH Mailing List is available for researchers working with or interested in the MLSFH.

Acknowledgments

The MLSFH gratefully acknowledge the generous support provided by the National Institute for Child Health and Human Development (NICHD, grant numbers R03 HD058976, R21 HD050652, R01 HD044228, R01 HD053781, R24 HD-044964), and the National Institute on Aging (NIA, grant number P30 AG12836). The MLSFH has also been supported by for pilot funding received through the Penn Center for AIDS Research (CFAR, NI-AID AI045008), the Penn Institute on Aging, the Malawi National AIDS Commission, and several other funding agencies.

Contact Information

The MLSFH is conducted by 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 \(IKI\)](#) in Zomba, Malawi. The primary contact persons for the MLSFH are:

[Hans-Peter Kohler](#), MLSFH Study Director, Population Studies Center, University of Pennsylvania, hpkohler@pop.upenn.edu.

[James Mkandawire](#), IKI, Zomba, Malawi, james.mkandawire@investinknowledge.org.

[Victor Mwapasa](#), College of Medicine, University of Malawi, vmwapasa@medcol.mw.

Additional members of the *MLSFH Study Team* are listed on the MLSFH Website at <http://www.malawi.pop.upenn.edu>.

Version: August 1, 2013