

The Malawi Longitudinal Study of Families and Health

Newsletter 2016-1:
MLSFH Mature Adults and
Aging Research



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, it is establishing a rare record of more than two decades of demographic, socioeconomic and health conditions in one of the world's poorest countries. The MLSFH has been the basis of more than 250 publications on topics ranging from sexual behaviors and HIV risks to marriage, migration, intergenerational transfers, non-communicable diseases and aging. 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.

Mature Adults & Aging Research

¶ *Mature adults* (= individuals adults aged 45+), represent an increasingly important subset of societies in SSA. The population of mature adults will grow more rapidly in many SSA countries than any younger 10-year age group in the next decades. In the next 50 years, 80% of the additional persons-years lived among adults as a result of increasing life expectancies in SSA low-income-countries such as Malawi will occur among individuals aged 45+. This growth of the mature adult population will contribute to a rising importance of non-communicable diseases (NCDs).

¶ While there is increasing recognition of addressing the challenges of individual and population aging in SSA, a dearth of population-based data on older individuals severely limits policy-relevant research on health and aging in SSA.

¶ The MLSFH is an exception: it provides a unique opportunity to study older individuals, aging and NCDs among mature adults, all within a

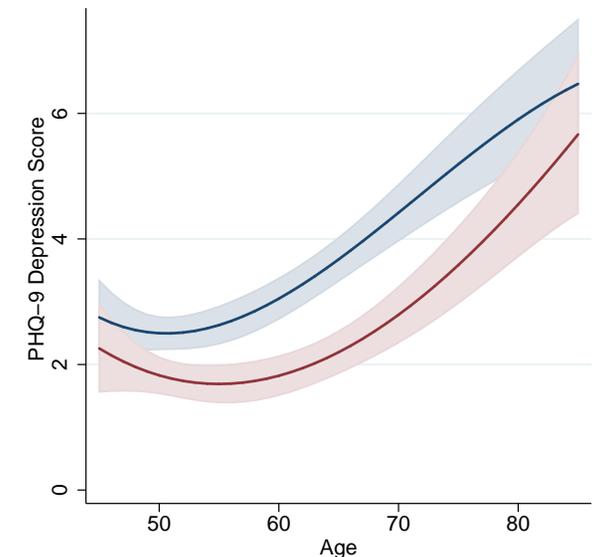
cohort perspective. For example, innovative longitudinal measures included in the MLSFH 2012–20 are well-being, physical/mental health, cognitive abilities, NCDs, work efforts, life histories, inter-generational transfers & social support, and family/social contexts of mature adults. Current key findings include:

¶ Mature and old adults have high levels of economic activity, both women and men, and they make significant financial and non-pecuniary contributions to families and society at large.

¶ Despite their growing demographic and socioeconomic importance, however, the well-being and productivity of mature adults is often low.

¶ Depression and anxiety are widespread among mature adults, and contrary to patterns observed in higher-income contexts, mental health declines markedly with age. Depression and anxiety are more frequent among women than men, and individuals are often affected by *both*. They are associated with adverse outcomes, such as less nutrition intake and reduced work efforts. Mature adults spend a substantial fraction of their lifetime—for instance, 52% for a 55 year old woman—affected by depression and/or anxiety.

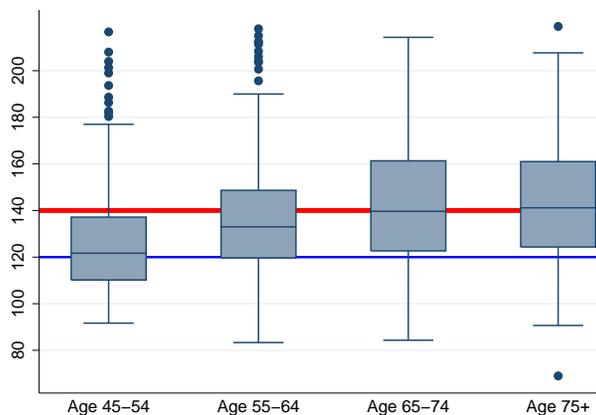
PHQ-9 Depression score among MLSFH mature adults (women: blue; men: red)



¶ Physical health declines rapidly with age in rural Malawi. At older ages, chronic and disabling conditions are common, leading to significant functional limitations in day-to-day activities, and a substantial gap between potential and actual productivity. 45-year old women 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. This prevalence of disabilities increases strongly with age.

¶ Despite the absence of conventional risk factors such as obesity among MLSFH mature adults (only 13% have a BMI above 25), high blood pressure is highly prevalent: 68% of MLSFH mature adults aged 45+ have pre-hypertension (systolic blood pressure ≥ 120 mmHg) or hypertension, increasing to 78% above age 60, indicating significant cardiovascular risk among mature adults.

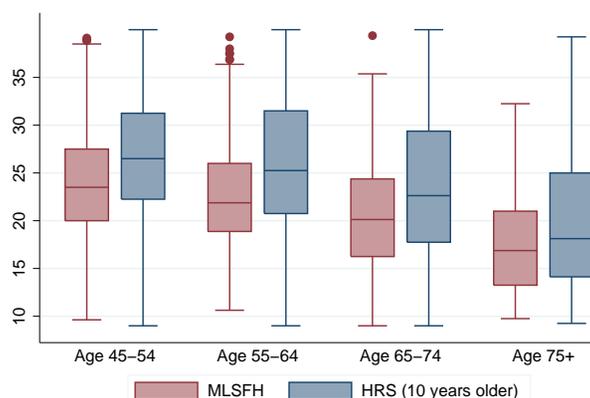
Systolic blood pressure by age, MLSFH mature adults (mmHG, average of 3 measurements)



¶ MLSFH results show that many mature adults in Malawi experience poor cognitive health, and that cognitive health declines substantially with age for both men and women. The age-related pattern of decline is remarkably similar to that seen in studies of cognition in the U.S. Some of the differences in cognitive health have had their roots relatively early in life, as indicated by the association of formal schooling with better overall cognitive health and a less-steep age-gradient.

¶ MLSFH mature adults have significantly weaker grip strength than U.S. adults, even when compared to U.S. adults who are 10 years older, indicating high levels of ADL limitations and elevated morbidity/mortality. Weak grip strength predicts poor mental health and cognitive decline.

Grip strength in kg, MLSFH mature adults compared to U.S. HRS respondents 10 years older



¶ Narratives about older age, and HIV at older ages are both centred on the importance of having bodily, moral and social power to perform broadly-defined “work.” Those who could not work were often excluded from the social world, highlighting the importance of mental and physical health for successful aging.

¶ MLSFH research on mature adults is important as it helps inform the health policies and health sector strategies required for preparing for the growing population of mature adults and elderly individuals. The growth rate of the population aged 60+ in SSA is projected to increase from 2% p.a. to over 4% during the next 45 years—4-times the growth rate in developed countries. Health systems remain poorly-equipped to manage and treat poor mental health and other non-communicable diseases, especially in light of these demographic changes, and MLSFH research documents an aging trajectory in Malawi that is distinctly different from that observed in higher-income countries. Context-specific research on aging and older individuals is thus urgently needed.

MLSFH Project Website

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

Acknowledgments

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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 Principal Investigator, Population Studies Center, University of Pennsylvania, hpkohler@pop.upenn.edu.

[Iliana Kohler](#), MLSFH Project Director, Population Studies Center, University of Pennsylvania, iliana@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>.