# The Malawi Longitudinal Study of Families and Health

Newsletter 1/2009:

Summary of Data Collection 1998–2008







# **Project Description**

The *Malawi Longitudinal Study of Families* and *Health* (MLSFH) is a collaboration of the University of Pennsylvania with the College of Medicine and Chancellor College at the University of Malawi. The MLSFH continues earlier research under the *Malawi Diffusion and Ideational Change Project* (MDICP). The goal of the MLSFH is to (1) *collect longitudinal data* in rural Malawi that provide a rare record of more than a decade of demographic, socioeconomic and health conditions in one of the world's poorer countries, and (2) *analyze* these data to investigate

- the multiple influences that contribute to HIV risks in sexual partnerships
- the variety of ways in which people manage risk within and outside of marriage and other sexual relationships;
- the possible effects of HIV prevention policies and programs; and
- the mechanisms through which poor rural individuals, families, households, and communities cope with the impacts of high AIDS-related morbidity and mortality.

# 2008 Fieldwork

The *Malawi Longitudinal Study of Families and Health* conducted a fifth wave (*MLSFH/MDICP-5*) of data collection from April-August 2008. Consistent with prior waves, respondents in MLSFH5 were interviewed and offered an HIV test. MLSFH-5 data collection also included several new components:

¶ weight and height measurements were taken for all respondents, as well as all children 5 years or younger;

¶ a sample of approximately 800 parents of MLSFH respondents was added to provide the opportunity to examine intergenerational relationships; and

¶ blood samples were collected for a subsample of 1,000 MLSFH respondents in Balaka dis-

trict. These samples were used to measure levels of HDL, LDL, triglycerides, glucose, C-reactive protein, HbA1c, albumin, total protein, urea, uric acid, and creatinine.

# Sampling 1998-2008

The MLSFH is conducted in three distinctive districts of Malawi: Rumphi (Northern region); Mchinji (Central), and Balaka (Southern).

The sampling strategy was not designed to be representative of the national population of rural Malawi, although the sample characteristics closely match those of the rural population of the Malawi Demographic and Health Survey.

A basic description of the MLSFH/MDICP sampling technique is below, and more information on project sampling can be found at http://www.malawi.pop.upenn.edu

¶ MDICP-1 1998: the original MDICP sample consisted of ever-married women age 15-49, and their husbands. These respondents were re-interviewed in MDICP-2, 2001, and all new spouses of men and women who remarried between 1998 and 2001 were added to the sample.

¶ MDICP-3 2004: In addition to the original sample and their new spouses, MDICP added a sample of approximately 1,500 adolescents, aged 15-25. These adolescents were both ever- and never-married.

¶ MDICP-4 2006: all respondents from previous waves in 1998, 2001 and 2004 were included in the sample, along with all spouses of 2004 adolescents, and any new spouses to respondents in the original sample.

¶ MLSFH/MDICP-5 2008: the new sample of approximately 800 parents of MLSFH/MDICP respondents was drawn from family listings from MDICP respondents in 2006. All living biological parents who resided in the same village as the respondent were included in the 2008 MLSFH new sample of parents. Also, as with previous waves, all previous respondents and new spouses were also included in the study.

# **Sample Characteristics**

The below Table describes basic features of the MLSFH/MDICP sample from 1998 to 2008. The survey response rate (the percentage of respondents in the MLSFH/MDICP sample who were successfully interviewed) is consistently above 65% in all waves. Of these respondents, over 90% of all individuals accepted the HIV test offered in the three most recent waves by MLSFH/MDICP.

	1998	2001	2004
Number of respondents	2,602	2,548	3,298
Age range (females)	15-49	18-52	15-55
Survey response rate	78.6%	72.1%	67.0%
HIV test acceptance	_	_	91.0%
HIV prevalence	_	_	6.4%
Attrition rate	_	14.9%	21.6%
Attrition due to:			
-migration	_	75.6%	58.4%
–mortality	_	13.0%	10.4%
-other factors	_	11.4%	31.2%
	2006	2008	2010
Number of respondents	<b>2006</b> 3,669	<b>2008</b> 4,052	2010
Number of respondents Age range (females)			2010 — —
	3,669	4,052	2010 — — —
Age range (females)	3,669 17–57	4,052 17–92	2010 — — — —
Age range (females) Survey response rate	3,669 17–57 67.9%	4,052 17–92 67.4%	2010 — — — — —
Age range (females) Survey response rate HIV test acceptance	3,669 17–57 67.9% 93.0%	4,052 17–92 67.4% 93.1%	2010 — — — — — —
Age range (females) Survey response rate HIV test acceptance HIV prevalence	3,669 17–57 67.9% 93.0% 7.4%	4,052 17–92 67.4% 93.1% 8.9%	2010 — — — — — — —
Age range (females) Survey response rate HIV test acceptance HIV prevalence Attrition rate	3,669 17–57 67.9% 93.0% 7.4%	4,052 17–92 67.4% 93.1% 8.9%	2010 — — — — — — — —
Age range (females) Survey response rate HIV test acceptance HIV prevalence Attrition rate Attrition due to:	3,669 17–57 67.9% 93.0% 7.4% 19.8%	4,052 17–92 67.4% 93.1% 8.9% 23.6%	2010 — — — — — — — —
Age range (females) Survey response rate HIV test acceptance HIV prevalence Attrition rate Attrition due to: -migration	3,669 17–57 67.9% 93.0% 7.4% 19.8%	4,052 17–92 67.4% 93.1% 8.9% 23.6%	2010 — — — — — — — — — — — — — — — — — — —

HIV prevalence among MLSFH/MDICP respondents increases from 6.4% in 2004 to 8.9% in 2008. Here HIV prevalence is calculated by starting with all HIV positive respondents in the current wave and imputing HIV positive respondents from a prior wave if the HIV positive respondent didn't accept HIV testing in the current wave. HIV positive respondents are significantly more likely to refuse HIV testing in future waves.

The attrition rate is the percentage of MLSFH/MDICP respondents who were successfully interviewed in the previous wave but not

interviewed in the current wave. Migration is the most common reason for attrition among MLSFH/MDICP respondents.

# 2008 Fieldwork Team

The MLSFH is supported by an extensive multidisciplinary network of scientists at more than 40 institutions in Africa, the United States and Europe. The research team is dedicated to integrating new researchers into its activities, and to making the results and data of the MLSFH widely available for public use.

Graduate and undergraduate students, and post-doctoral research who were involved with 2008 MDICP data collection are listed below. Also below are Malawian supervisors who assisted in data collection, with area of specialization in parenthesis.

### Graduate Students 2008

Alex Radunsky	Kim Yi Dionne
Amanda Tuffli	Marcela Urbina
Annie Laurie Allen	Margret Frye
Ben Capistrant	Michelle Vaillancourt
Crystal Biruk	Monica Grant
Emily Freeman	Oleosi Ntshebe
Gail Potter	Peter Fleming
Janneke Verheijen	Philip Anglewicz
Jessica Bishop	Raul Santaeulalia-Llopis
Keely Bisch	Rebecca Burroway
Keshet Ronen	Ruben Castro
Kim Deslandes	Yael Danovitch

# Malawian Supervisors 2008

Andrew Mganga
Augustine Harawa
Doreen Kanyika
Ernest Mlenga
Evans Mwanyatimu
Felix Phuka
Hastings
James Mkandawire

Khumbo Chinemba Mathews Chikomba Mike Khoza Mike Mewnechanya Mtawingwa Msumba Patrick Msukwa Sheena Kayira Tony Milanzi

# **Project Website**

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

Online access to MLSFH & MDICP micro-data, newsletters, working papers and project documentation; links to MLSFH & MDICP publications.

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