

COMPARISON OF RETROSPECTIVE DHS DATA ON AGE AT MARRIAGE IN AFRICA

Solène Lardoux

Département de démographie – Université de Montréal

March, 20th 2012
INED Paris

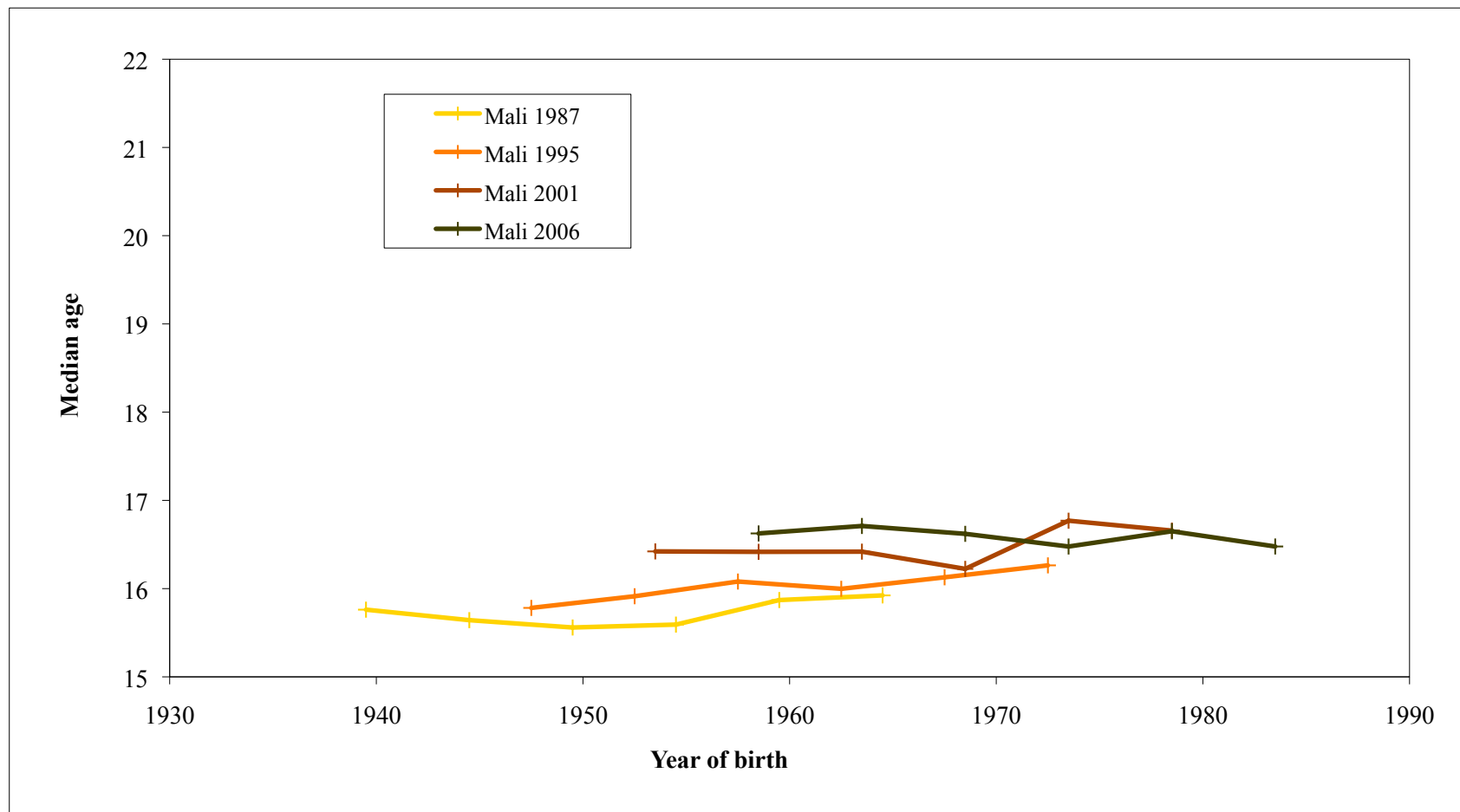
Journée Pôle Suds: Quality and comparability of demographic data in sub-Saharan Africa

Introduction



- Differences observed between series of data
 - ▣ undermine the credibility of retrospective data
 - ▣ reveal biases related to the data collection
- May be due to:
 - ▣ changes in implicit definitions (of the population) or
 - ▣ explicit changes (recording by interviewers)

Figure 1. Age at marriage by year of birth and survey, women, DHS Mali



Source : DHS. Hertich and Lardoux 2007, the 2006 Mali DHS was added.

Table 1. Groups of countries according to degree of difference of age at marriage for each generation of women, across surveys

Group I: Coherent retrospective series	Group II: Later age at marriage in more recent surveys	Group III: Earlier age at marriage in more recent surveys
Burkina Faso	Benin	Ethiopia
Chad	Cameroon	Guinea
Malawi	Cote d'Ivoire	Nigeria
Rwanda	Ghana	Tanzania
Zimbabwe	Kenya	Zambia
	Madagascar	
	Mali	
	Mozambique	
	Namibie	
	Niger	
	Uganda	
	Senegal	
	Togo	

Questions



- Can we use retrospective data of successive DHS to tell the trends of age at marriage?
- Can we bring out patterns of distortion that are due to systematic biases?

Sources of biais

- Limits of retrospective data (Lesthaeghe et al. 1989, van de Walle 1996) related to:
 - ▣ Declaration of age at marriage and age at survey
 - ▣ Problems of memory
 - ▣ Reference to the norm to determine age

Demographic and Health Survey (DHS)



- DHS data:
 - ▣ Easily available
 - ▣ Source to study nuptiality trends
 - ▣ Allow us to compare age at marriage by generation of women

Data



- 23 countries with at least 2 rounds of DHS surveys
- Indicators:
 - ▣ Median age at marriage
 - ▣ Generation
 - ▣ Completeness of information on date of birth and marriage
 - Percent of women with at least year of marriage and year of birth (not imputed)

Data (cont'd)

- 3 groups of countries according to degree of difference of age at marriage for each generation of women, across surveys (Table 1):
 - Group 1: retrospective series are coherent
 - Group 2: the more recent the survey the later the age at marriage
 - Group 3: the more recent the survey the younger the age at marriage

Method

- Comparative analysis of:
 - ▣ Sample composition of successive surveys according to: place of residence, level of instruction, marital status and generation of women
 - ▣ Completeness of information to determine age at marriage and date of birth

Possible sources of explanation for differences across series



- Selection of surveyed population
- Changes in methodology of data collection
- Declaration of the interviewee (knowledge and screening of information)
- Interaction between interviewee and interviewer to declare dates of events

Results



Determination of time at first marriage



- Questions on month and year when interviewee started living with husband
- Reference is made to time at first birth
- Same section on marriage across surveys

Sample composition?



- Total number of interviewed women varies across successive surveys (increases or decreases)

- No significant change in
 - ▣ Percentage of urban/rural
 - ▣ Level of instruction
 - ▣ Marital status
 - ▣ Generation

Percent single across cohorts, Mali

Table 2. % of never married in each generation, by survey, Mali

	DHS 1995	DHS 2001	DHS 2006
G 1977-81	54	15	2
G 1972-76	15	4	1
G 1967-71	5	2	0.3
G 1962-66	2	1	0.1
G 1957-61	0.5	0.1	0.1
G 1952-56	0.1	0	-

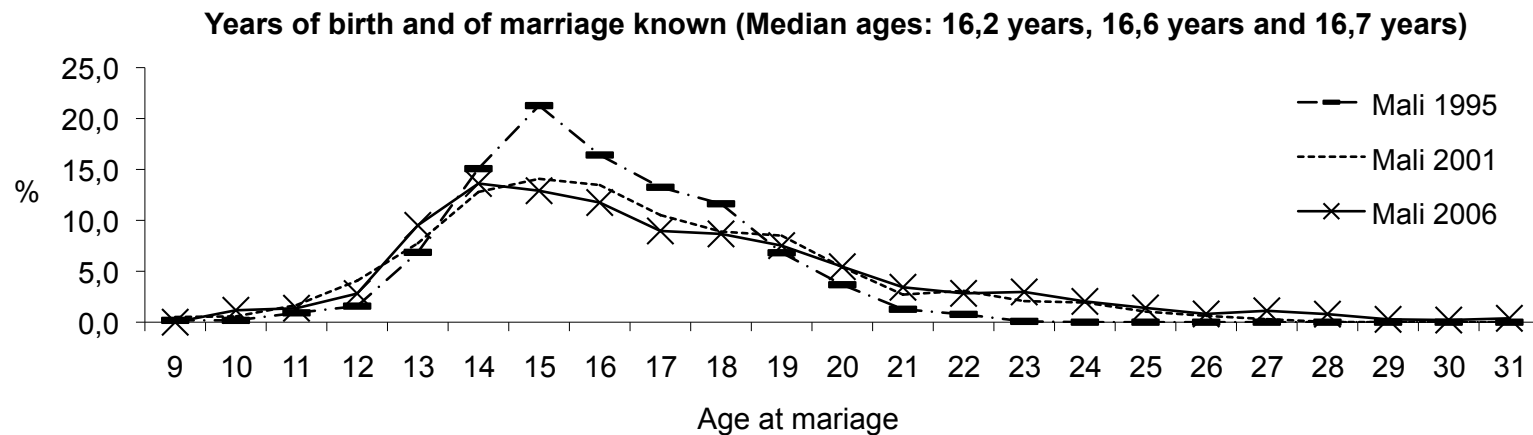
Percent single across cohorts, Kenya

Table 3. % of never married in each generation, by survey, Kenya

	DHS 1989	DHS 1993	DHS 1998	DHS 2003	DHS 2008-09
G 1974-78	--	87	40	17	7
G 1969-73	77	41	15	6	6
G 1964-68	29	12	7	5	7
G 1959-63	11	6	3	3	5
G 1954-58	5	3	3	4	--

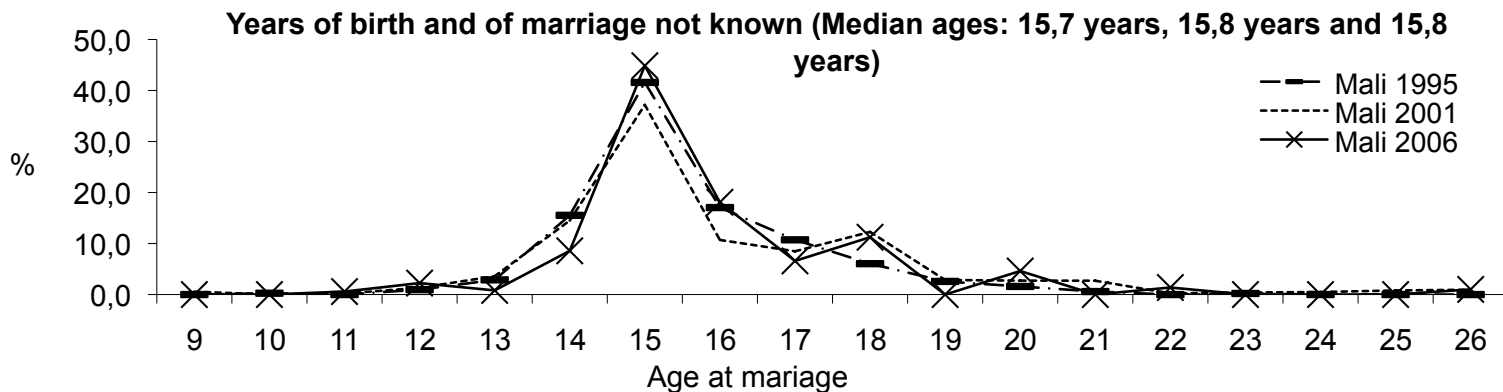
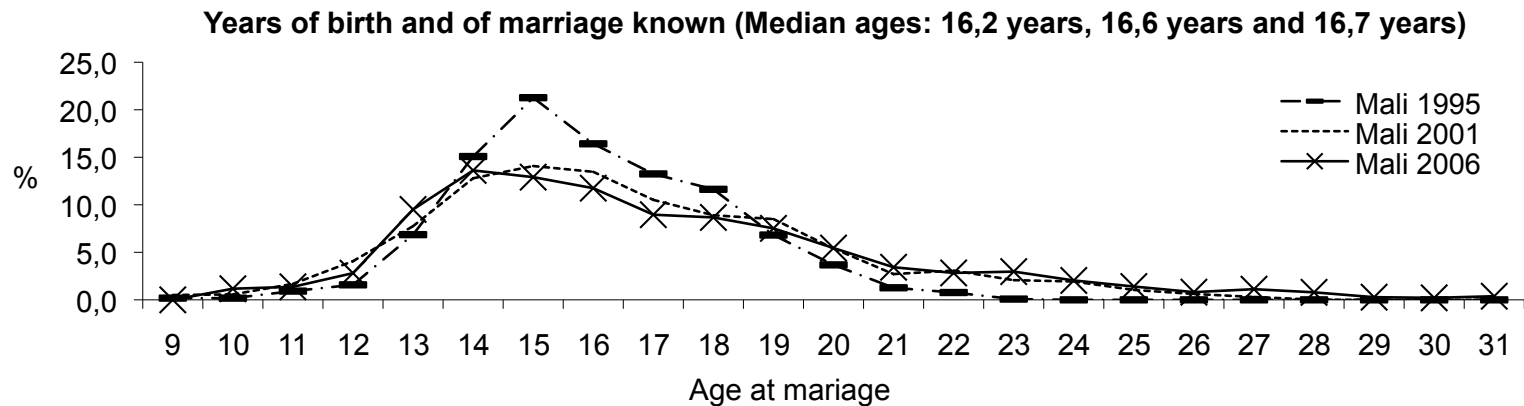
Completeness of information, comparison for one generation across surveys, Mali

Generation 1972-76: Age at marriage when year of birth and marriage are known
(Median ages 16,2 years, 16.6 and 16.7 years)



Source : DHS Mali

Generation 1972–76: Age at marriage when year of birth and marriage are known and when unknown, EDS Mali



Has completeness of information been improved?



- In countries where series of age at marriage are coherent
 - ▣ Highest percentages of women declare year of marriage and birth

Has completeness of information been improved? (cont'd)

- In countries where age at marriage is higher, or younger in more recent surveys, for the same generations
 - Completeness of information improved

- In 2 countries (Burkina Faso and Guinea):
 - Very low level of completeness of information (age was the main source)

Conclusion



- Series of median age at marriage in successive DHS surveys are incoherent in a lot of countries
- By consequence, we need to pay attention when using age at marriage in successive surveys

Conclusion (cont'd)

- No systematic bias to determine patterns of distortion, except :
 - ▣ quality of recording by interviewers that may depend on interviewers' characteristics and training, but this is not documented; interaction with interviewee
 - ▣ Reference to same norm of age at marriage across surveys, or moving norm

Next research



- Evaluation by comparing with transversal data such as census data may add to a better understanding of the sources of bias