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Fertility trends by ethnic groups in Cameroon: evidence from three Demographic and Health Surveys

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Extended abstract

Introduction

Fertility decline began to be observed in sub-Saharan Africa in the 1980s (Tabutin et Schoumaker 2004; Sneeringer 2009; Moultrie et al. 2008; Eloundou et al. 2000; Machiyima, 2010), although some situate the onset more early in the 1960s (Garenne and Joseph 2002). The Total Fertility Rate (TFR) dropped in this region from 6 in 1960s to 2.9 births per woman by 2005 (United Nations 2007). While in Latin America, Asia and North Africa, fertility has fallen from about 3 children per woman, in sub-Saharan Africa it fell in the last four decades from about 1.5 children per woman (United Nations 2007). However, Africa is not homogeneous, "it is a land of contrasts," writes Hugon (2010). This is even truer at the scale of large regions, states or social groups (Tabutin and Schoumaker 2004; Ferry 2007). How to speak therefore of African demography in general and Cameroon in particular, even though this country is defined as a real "mosaic settlement," as an "Africa in miniature" because of its geography and its history of settlement? Having inherited two colonial languages, French and English, Cameroon also has more than 280 ethnic groups for about 20 million people. Because "demographic facts, as embedded in social facts, can not only be treated with statistics and economic indicators" (Ferry 2007: 18), it is evident when it comes to study the fertility behavior, we must be seen in its individual context, including in its cultural identity. The observation of different crop groups within the same country then is especially rewarding. Thus, at the country level, taking into account homogeneous geographical and cultural units highlights local specificities and identifies demographic regimes differentiated in space. This provides a better assessment of the impact of population policies, and therefore a better orientation of policy actions. Ethnicity in this case, by cultural models (social organization, environmental practices, etc.), standards, ideas, beliefs and attitudes that are conveyed by its members may influence fertility.

In Cameroon, TFR declined from 6.5 in 1978 to 5.2 by 1998. Then it stabilizes around 5 until the recent 2011 survey. The paper examines the role of cultural factors, namely, ethnicity on fertility trends in Cameroon using Demographic and Health Survey (DHS), and in other hand, anthropological information in order to assess the fertility behavior of the different social groups. It intends to give new insights into the reproductive behavior of certain ethnic groups and provide a contribution to understand the pattern of fertility in Cameroon.

Data sources and quality

Source

Databases that are used in this research are Demographic and Health Survey (DHS) conducted in Cameroon in 1998, 2004 and 2011. In this paper, we exclude the first survey conducted in 1991 because ethnicity variable has not been collected. DHS are part of ICF International global program of demographic and health surveys. Although the latest 2011 survey was coupled to the Multiple Indicator Cluster Surveys (MICS), which incorporates the International Multiple Indicator Cluster

Surveys by UNICEF program, the methodology of data collection is similar to the previous DHS and indicators are therefore comparable. DHS are made from a survey two-stage stratified cluster and are nationally representative.

However, DHS do not allow detailed analysis by each ethnic group. Given the low numerical strength, we adopt for this purpose groupings in DHS that respect, as a whole, cultural homogeneity. Note also that the general census of population and housing (RGPH) was the most appropriate source, but the variable of interest namely ethnicity, has not been queried in the last census of Cameroon in 2005.

Quality of data

Even though they are subject to inherent errors due to sampling or data collection procedure, their quality are generally recognised acceptable (Tabutin and Schoumaker 2001;Garenne 2010). In fact, errors in omission of births and systematic displacement of children's birth have been found (De Graft 1988; Arnold 1990). Consequently, we have an underestimation of births during the last period before a survey, generally 0-5 years, and overestimation, about 6 and more years (Schoumaker 2009; Machima 2010).They remain however, the most reliable data available in sub-Saharan Africa that provide substantial information on fertility levels (Garenne and Joseph 2001; Garenne 2010; Machiyama 2010).

Table1 shows the composition (structure) of the ten ethnic groups represented in the three last DHS conducted in Cameroon according to the four age groups we adopted.

Table 1: Structure by age group by ethnic groups, DHS 1998, 2004 and 2011

	Arab-Choa/ Peulh/Haoussa/Kanuri	Bitu-Mandara	Adamaoua-Oubangui	Bantouïde South-West	Grassfields	Bamilike/Bamoun	Côtier/Ngoe/Oroko	Beti/Bassa/Mbam	Kako/Meka/Pygné	Stranger/other	All
DHS 1998											
15-19	24,15	20,14	24,4	25,39	21,89	26,11	21,86	23,46	23,59	18,08	1282
20-29	32,54	39,27	30,28	44,38	44,26	36,89	39,58	35,5	34,92	37,66	2049
30-39	23,99	23,63	27,99	16,53	22,06	23,45	27,07	25,74	20,31	33,36	1332
40-49	19,32	16,96	17,33	13,69	11,79	13,56	11,49	15,3	21,18	10,9	839
All	344	854	487	87	761	1080	236	1246	327	72	5499
DHS2004											
15-19	24,22	20,99	25,15	23,69	25,2	25,84	27,86	26,93	23,99	25,05	2684
20-29	37,16	38,58	35,99	38,9	37,99	39,17	34,81	36,49	36,04	36,11	3999
30-39	22,35	25,69	23,89	25,69	23,83	20,89	22	21,68	21,15	27,53	2430
40-49	16,27	14,74	14,97	11,72	12,99	14,1	15,33	14,9	18,82	11,32	1543
All	880	1178	1153	346	1140	2633	458	2164	286	404	10656
DHS 2011											
15-19	23,21	22,73	22,31	27,81	25,25	23,23	24,08	22,27	24,75	22,04	3589
20-29	38,35	37,21	37,07	31,49	36,1	38,88	34,58	39,29	34,13	38,79	5816
30-39	23,61	24,39	23,78	23,96	23,19	23,45	23,06	22,85	23,13	22,97	3621
40-49	14,82	15,67	16,85	16,74	15,46	14,43	18,27	15,59	17,98	16,19	2400
All	1421	2157	1471	211	2170	3709	669	2765	397	395	15426
Total	100	100	100	100	100	100	100	100	100	100	

Source: DHS 1998, 2004, 2011. Author's calculation

Changes in ethnic groups over time in some demographic and socioeconomic characteristics

Education

When we consider the education level, especially women who have no education, women mostly located in the North (marked in blue in Fig.3) are the most representative. For instance, in 1998, 8 women over 10 belonging to ethnic group Arab-Choa/Peulh/Haoussa/Kanuri had no education. The situation has changed considerably by 2011. In 2011, they are about 6 over 10, while in the other groups; we observe less than 10% of women with no education across all surveys. Then, although the percentage has fallen in groups ABA, there remains a large gap between these later and the others.

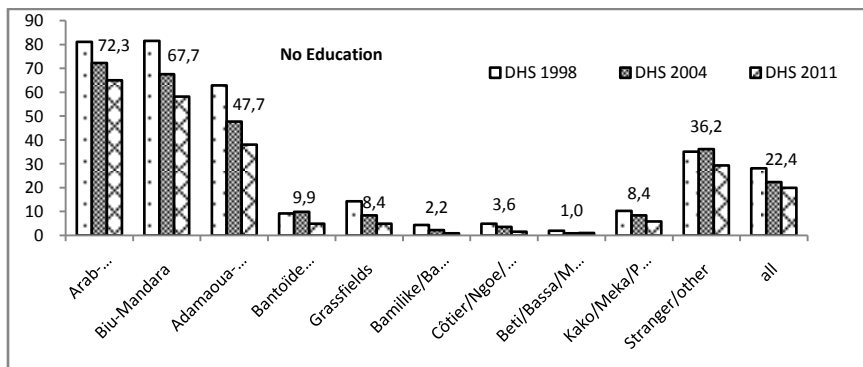


Fig.3: Education and ethnicity
Source: DHS 1998, 2004, 2011. Author's calculation

Trends in fertility by ethnic groups

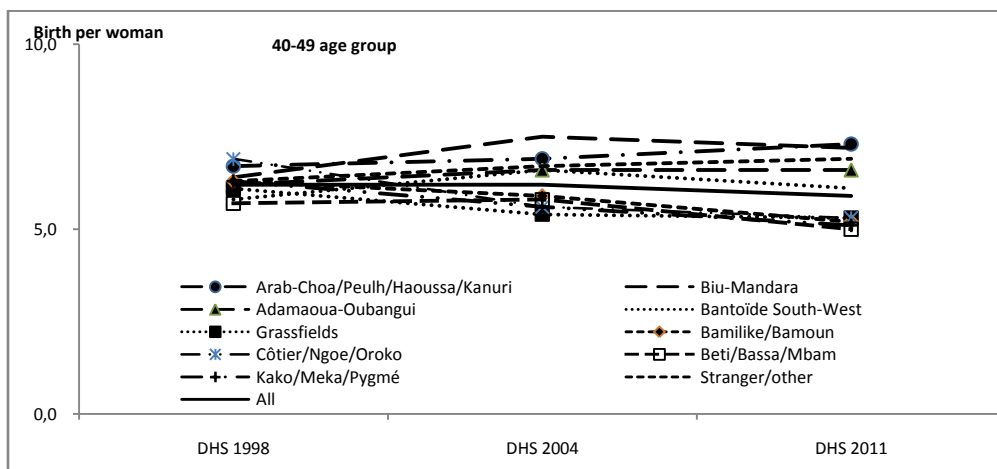


Fig. 5a: Fertility trends of women aged 40-49 (Mean number of children ever born per woman)
Source: DHS 1998, 2004, 2011. Author's calculation

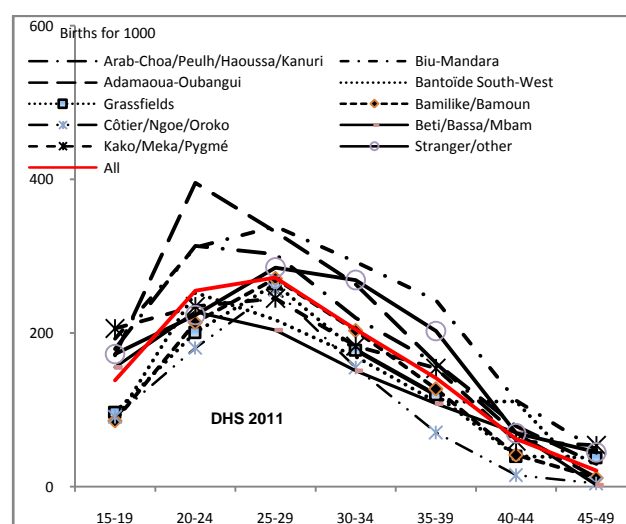
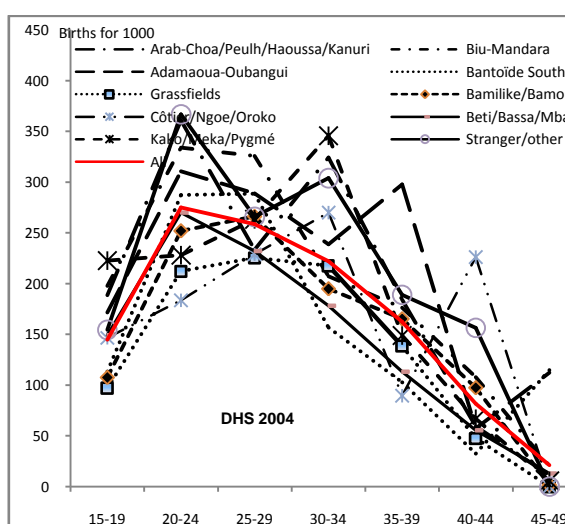


Fig. 6a: Age-specific fertility Rates (ASFRs) of women aged 15-49.
Source: Author's calculation Demographic and Health Survey (DHS) DHS 2004 and 2011.

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