

Stalling demographic transition in Sub-Saharan Africa: what is the importance of desired fertility? Evidence from East Africa



Universiteit Utrecht

Dieudonne Muhoza Ndaruhuye

Supervisors: Prof. Pieter Hooimeijer and Dr. Annelet Broekhuis

dieumu_res@yahoo.fr

Introduction

The aim of this research is to gain insight into the stalling of the demographic transition in Sub-Saharan Africa, by analyzing the variation in desired and in excess fertility across and within four countries of the East-African Community: Kenya, Tanzania, Uganda and Rwanda.

Research questions

To what extent does the desired family size vary between countries, and between different communities within countries?

To what extent do socioeconomic and socio-cultural factors impact the change of desired family size in the selected countries?

Poisson regression coefficients of selected variables on the desired fertility

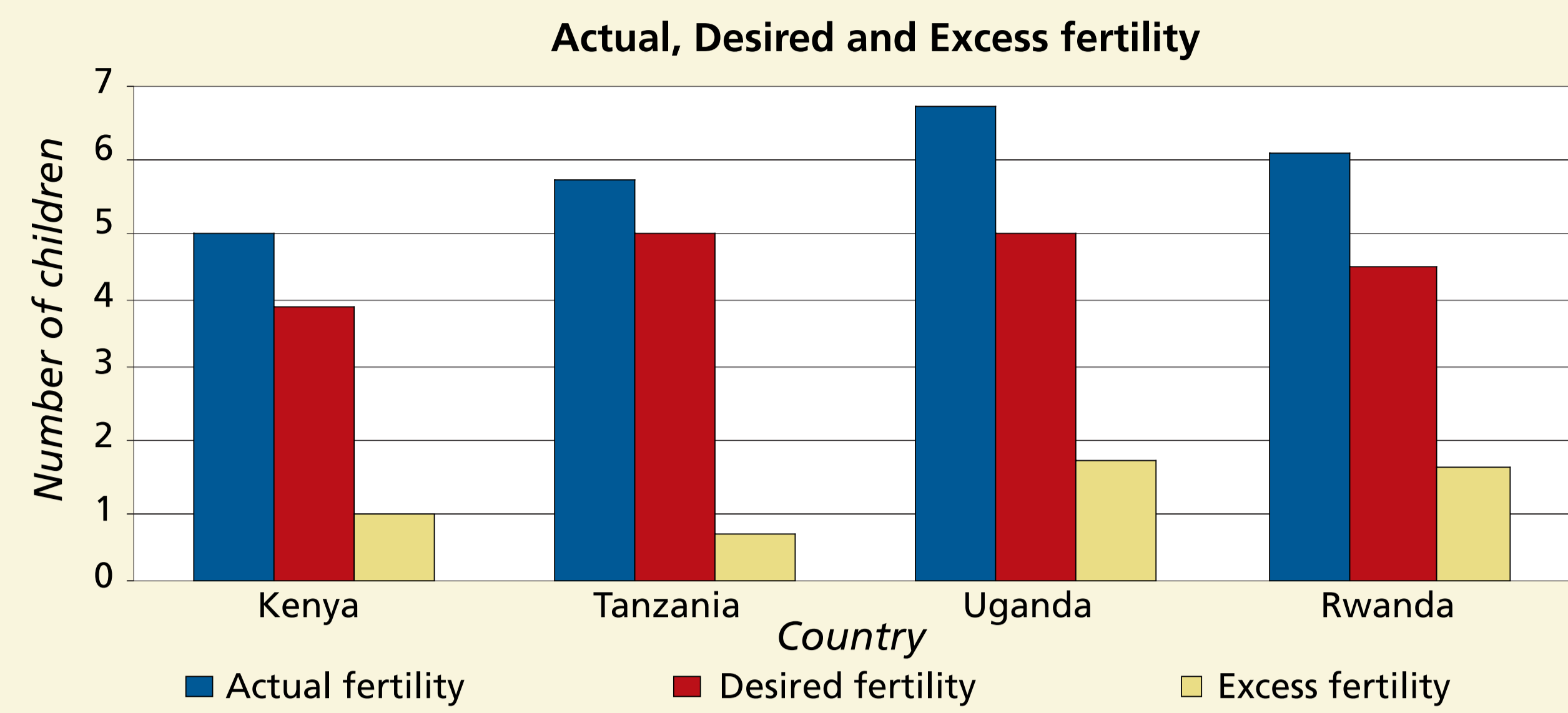
Variable	Categories	Kenya	Tanzania	Uganda	Rwanda
Intercept		6.686	5.549	6.348	4.445
Age		-0.005	0.001	0.022***	-0.008
Number of living children		0.194***	0.268***	0.193***	0.128***
Residence	Urban (vs rural)	0.197	-0.206	-0.302*	-0.284**
Type of union	Polygamous (Mon)	0.133	0.179**	0.005	0.009
No of deaths (Ref. two or +)	All survive	-0.604***	-0.515***	-0.377***	-0.170*
	One death	-0.372***	-0.326***	-0.289***	-0.096
	No children	-0.208	0.026	-0.268	0.065
No of siblings (Ref. 10+)	0-4	-0.313***	-0.364***	-0.151	-0.045
	5-6	-0.208**	-0.266***	-0.065	-0.052
	7-9	-0.099	-0.058	-0.102	0.024
Woman's religion (Ref. Catholic)	Protestant	-0.345	0.357*	-0.167	0.129
	Muslim	3.262***	1.396***	-0.161	-0.637
	Others	1.266***	1.367***	0.210	0.221
Woman's education (Ref. No education)	Incompl primary	-1.035***	-0.054	-0.461***	-0.171
	Comp primary	-1.435***	-0.049	-0.929***	-0.197
Partner's education (Ref. No education)	Secondary and +	-1.652***	-0.470*	-0.862***	-0.557***
	Incompl primary	-1.067***	-0.331***	-0.973***	-0.055
	Comp primary	-1.060***	-0.575***	-1.053***	-0.054
	Secondary and +	-1.120***	-0.477***	-1.086***	-0.006
	No response	-1.244***	-0.035	-1.054***	-0.116
Woman earns income	Yes (vs No)	-0.060	-0.057	-0.087	-0.023
Partner's occupation (Ref. Farmers/No work)	Craftsmen	-0.043	-0.124	-0.174*	-0.149*
	Workers in services	-0.001	-0.064	-0.158	0.024
Wealth of households (quintiles) (Ref. poorest)	Poorer	-0.298**	-0.096	-0.161	0.038
	Middle	-0.470***	-0.109	-0.103	0.038
	Richer	-0.547***	-0.344***	-0.116	-0.016
	Richest	-0.811***	-0.714***	-0.494***	-0.102
Protestant /education	Incomplet primary	0.347	-0.138	0.231	0.045
Ref. No education	complet primary	0.577*	-0.465**	0.427	-0.225
	Secondary and +	0.520*	-602	0,187	-0,028
Muslim by education	Incomplet primary	-2.079***	-0.453*	0.365	0.301
	Ref. No education	complet primary	-2.442***	-0.987***	0.541
	Secondary and +	-2.548***	0.177	0.193	0.812
Others/education (Ref. No education)	Incomplet primary	-0.348	-0.344	-0.242	-0.161
	complet primary	-0.233	-0.329	-0.380	0.338
	Secondary and +	-1.041	-1.399	0.237	-0.906
Religion in urban areas (Ref. Catholic)	Protestant	-0.021	0.037	-0.037	0.056
	Muslim	0.024	-0.223	0.440	-0.006
	Others	-0.800	-0.990	-0.290	0.070

* Significant at 10% level; ** Significant at the 5% level; *** Significant at the 1% level

Family planning implications

Desired fertility is not the only proximate of the current high fertility level in Rwanda; unmet need is also a major determinant. This fact might be taken into account seriously in family planning programs in Rwanda, but also in Kenya and Uganda, where this fact partially counts. In Tanzania, the desired fertility and access for FP are both determinants. Therefore, family planning programs should be focused on both aspects.

In all countries, family planning programs should be more oriented to particular groups like less educated, rural Muslims and poorer people.



Methodology

Data are derived from the latest Demographic and Health Surveys (DHS) of the selected countries.

Poisson regression is used to determine factors associated with the desired fertility at national level (1) and at community level (2).

Preliminary results

Woman's educational level, that of her partner and wealth of the household are negatively associated with the desired family size, much more in Kenya than in Tanzania and Uganda. There is no relation in Rwanda. Having an independent income and partner's occupation do not influence the preferences for children in any country.

Religion and number of siblings constitute two socio-cultural discriminators of intended family size only in Kenya and Tanzania: Muslims desire more children than Christians. Women born in smaller families prefer fewer children than their counterparts from larger families.

Higher educated groups show similar patterns regardless of their religious affiliation, but among lower status groups religion discriminates. Rural Muslims are more conservative than rural Christians.

Conclusion

Fertility differences are the largest in Kenya, suggesting that the demographic transition is more advanced: excess fertility appears mostly among lower social categories. The fertility transition is at the starting point in Tanzania: excess exists among higher social classes, not yet among lower status groups.

Rwanda and Uganda have higher excess fertility, but contrary to the other two countries, it is more spread in almost all categories of population. Education and not economic position shape excess fertility.

