

Effect of Early marriage on fertility and women empowerment outcomes: Evidence from selected Eastern Africa Countries

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Abstract

This paper uses data from recent Demographic and Health Surveys data from five East African countries of Burundi (2010), Kenya (2008/09), Rwanda (2010), Tanzania (2010) and Uganda (2011) to explore the link between female empowerment and total fertility via early marriage, defined as marriage before age 18. Early marriage directly impacts on fertility by increasing the duration of exposure to conception and childbearing. At the same time, it exposes the young woman to physical consequences of early sex and pregnancy; a disrupted education; and reduced autonomy and bargaining power. This study seeks to analyze using appropriate regression procedures, first the effect of early marriage on a woman's fertility and second, the empowerment effect of early marriage. Attention will be paid to discussing the endogeneity and heterogeneity impact of current age and marital duration. The findings of this study will be helpful in identifying effective women empowerment channel.

Key words: Eastern Africa, Early marriage, Fertility, Women Empowerment, and Bargaining Power

Introduction

While progress towards implementation has been made at global, regional and national levels, continuing and new challenges require that high priority be given to SRHR for all, particularly women and girls in the United Nations post-2015 development agenda (Germain, Sen, Garcia-Moreno, & Shankar, 2015). Successful implementation of the SDGs and agenda 2063 by the will require an understanding of various factors that relate to and impact on development. A number of social, economic and health outcomes are associated with early marriage (Jain & Kurz, 2007; Santhya et al., 2010; UNICEF, 2005). For example, early marriage tends to curtail young women's educational opportunities, and those who marry early tend to have low levels of educational attainment (International Center for Diarrhoeal Disease Research, 2007; Lloyd & Mensch, 2006). Likewise, studies in diverse settings have found that females who marry at young ages may be less capable than those who marry later of asserting themselves in their marriage, which may place them at higher risk of experiencing physical and sexual violence.

Marriage has traditionally been early and universal in sub-Saharan Africa and this has been blamed for high fertility and the failure among other things to achieve most MDGs (Ayiga & Rampagane, 2013; Rutaremwa, 2014). Fertility reduction is often associated with improved status of women, particularly, free partner choice, women's education and wealth of the family (Larsen & Hollos, 2003). Studies in low-income countries have shown that women's empowerment (i.e. the freedom of women to exercise their judgment in order to act for their own interests) influences a number of other reproductive and child health outcomes (Mistry, Galal, & Lu, 2009). There are therefore arguments adopted in literature that that higher fertility rates might be

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lowered through interventions that enhance women empowerment (Martin, 1995; Mbwambo, Chingonikaya, & Mwatawala, 2013). Evidence also suggest that the differences between empowered versus un-empowered women and their families in the ways that decisions about the timing of marriage may not be substantial (Schuler & Rottach, 2011).

What is clear however is that mainstream fertility literature generally overlooks the decision-making nexus wherein men's authority seemingly overrides women's preferences (Dodoo & Frost, 2008). Women empowerment and economic development are closely related: in one direction, development alone can play a major role in driving down inequality between men and women; in the other direction, empowering women may benefit development (Upadhyay et al., 2014). Whereas the latter may be true, Duflo (2012) argues that the interrelationships between women empowerment and development are probably too weak to be self-sustaining, and that continuous policy commitment to equality for its own sake may be needed to bring about equality between men and women.

Whereas women's empowerment has become a focal point for development efforts worldwide (Malhotra & Schuler, 2005), there is a need for an updated, critical assessment of the existing evidence of the link between early marriage, fertility and women's empowerment. This study therefore is an attempt to answer the following questions within the context of Eastern Africa: 1). Is there a relationship between early marriage and achieved fertility? 2). What is the link between early marriage and empowerment? 3). Does empowerment lead to realization of fertility aspirations of individual women in the region?

Context

A negative correlation between age at first marriage and lifetime number of births is one of the most common relationships found in the research literature (Bongaarts, 1983). Table 1 shows the distribution of the study population by some selected key indicators. The total fertility rate was highest in Burundi and Uganda at 6.4 and 6.2 children respectively and was least in Kenya and Rwanda at 4.6 children in both countries.

Table 1: Distribution of study population by some key selected country indicators

Country (Year of survey)	Total Fertility Rate	% Women with a Secondary Education	Median age at Marriage
Burundi (2010)	6.4	12.1	20.3
Kenya (2008/2009)	4.6	34.3	20.0
Rwanda (2010)	4.6	16.2	21.4
Tanzania (2010)	5.4	16.2	18.8
Uganda (2011)	6.2	27.2	17.9

Table 1 shows that the percentage of women with a secondary education was highest in Kenya (34%) followed by Uganda (27%) and was least in Burundi with only 12% having attained a secondary education level. The median age at marriage was least in Uganda at 18 years and was highest in Rwanda at 21 years. Generally the countries of the East African region depict varying socio-demographic profiles.

The definition of marriage used in this study is that adopted by international conventions¹ that define marriage as: "a formalized, binding relationship between consenting adults, i.e. individuals aged at least 18 of full maturity and capacity to act, with legal and/or social standing, in which sexual relations are legitimized and as an arena for reproduction and child rearing which has state recognition".

The physical consequences of early childbearing can be life threatening for both mother and child. Worldwide, maternal mortality is the most prevalent cause of death among women aged 15 to 19 (UNICEF, 2011). Women aged respectively under 20 and 15 face a risk of dying in childbirth which is two and five times higher than that of women over 20 and when they survive childbirth a considerable proportion of them suffer from severe pregnancy or childbirth complications (Jejeebhoy & Rao, 1995). Early motherhood is also associated with poor maternal health outcomes that subsequently feed through to child health.

Data and Methods

Data

The data we analyze here comes from the most recent waves of the Demographic and Health Survey collected in the East African countries of: Burundi (2010), Kenya (2008/2009), Rwanda (2010), Tanzania (2010) and Uganda (2011), respectively. These DHS data are designed to be nationally representative, and contain very rich information on the marriage, fertility and empowerment, as well as other demographic and health characteristics of women of reproductive ages. The full sample studied consists 34,613 ever-married women aged 15 to 49. The distribution of the study population from the five countries is shown in Table 2.

Table 2: Distribution of study population by country of residence

Country (Year of survey)	Total Sample (Women)	Ever married Women	% Ever married
Burundi (2010)	9,389	6,272	66.8
Kenya (2008/2009)	8,444	5,809	68.8
Rwanda (2010)	13,671	8,380	61.3
Tanzania (2010)	10,139	7,594	74.9
Uganda (2011)	8,674	6,558	75.6
Total	50,317	34,613	68.8

Variables

Explanatory variables used include other women's characteristics: early marriage, age, household characteristics - urban, religion, wealth index, and regional characteristics. Husband's characteristics education, age, rural/urban residence, religion, wealth index, and regional characteristics are also analyzed.

Dependent variables are three, and are derived from the three study questions, namely:

- 1) Achieved fertility measured as the count number of children born to a woman.
- 2) Empowerment indicator - The most important explanatory variable is female

¹Among which the main are: The Universal Declaration of Human Rights, the UN Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the Inter-African Committee on Traditional Practices Affecting the Health of Women and Children (IAC), the 1989 Convention on the Rights of the Child, and the 1990 African Charter on the Rights and Welfare of the Child.

empowerment, which derived from the following variables: domestic decision-making ability, the existence of domestic violence and female education. Invariably an index of women empowerment will be generated and used in the regression model as the outcome variable.

- 3) Desired fertility – also measured as a count number of the children desired by the woman.

Analysis methods

This paper is primarily interested in the impact of early marriage on number of children born; women's empowerment and on desired number of children by woman. Three different models will therefore be estimated in order to test the relationships, a Poisson regression for outcomes 1 and 3, while an OLS will be used for estimating outcome 2 – the empowerment indicator.

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