

Is Bridewealth Payment Associated With Shorter Birth Intervals?

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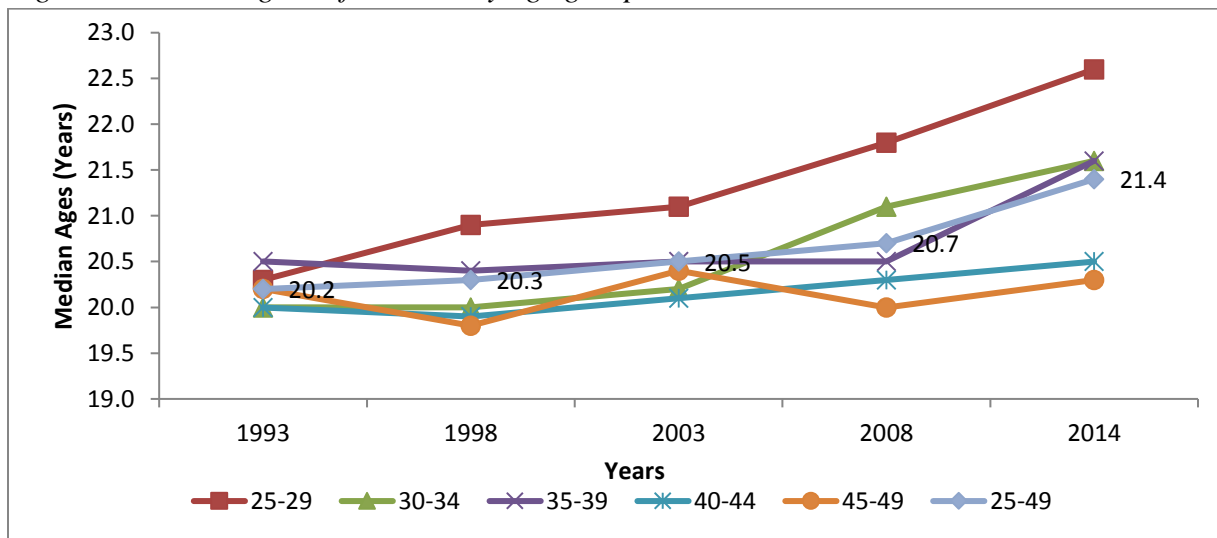
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INTRODUCTION

The median age at first birth is steadily increasing across almost all age groups in Ghana (GSS, GHS, & ICF International, 2015). Figure 1 displays women's median ages at first birth and highlights the increase in one full year in the 20-year period among all age groups, and more than two full years in the youngest cohort (25-29). This suggests that among younger women especially, postponement of childbirth is a real phenomenon that requires attention. Various factors have been postulated to affect and bring about changes in reproductive behavior (including postponing births), among them economic (Yoder, Lugalla & Sambaiga, 2013), political (Abbasi-Shavazi, Morgan, Hossein-Chavoshi, & McDonald, 2009; Baochang, Feng, Zhigang, & Erli, 2007) and sociocultural (Abbasi-Shavazi, et. al, 2009; Kemkes-Grottenthaler, 2003).

Figure 1: Median ages at first birth by age groups across six GDHS datasets



The bridewealth literature extensively discusses bridewealth payment in sub-Saharan Africa (SSA) and its associations with men's control over women's reproduction and production (Horne, Dodoo, & Dodoo, 2013). Bridewealth payment is a cultural practice (Rudwick & Posel, 2015; Wojcickia, Stratenb, & Padianb, 2010), and the symbolic nature of the transfer of women's reproductive rights to their husbands also implies that men can decide the timing and number of children the couple have (Bawah, Akweongo, Simmons, & Phillips, 1999; Horne et al., 2013). Thus, with bridewealth payment, one might expect less

opportunity for delayed childbearing, as power shifts to men who are supposedly more pronatalistic. However, if modernization undermines cultural practices such as bridewealth payment, then one would expect birth intervals to lengthen over time. This study seeks to examine the cultural institution of bridewealth payment and its associations with women's first births among married and cohabiting women in Ghana, and in addition, we assess the birth postponement tactic of birth intervals, and how they relate with bridewealth payment among these women in union.

We hypothesize that among women in union, bridewealth payment is associated with a shorter duration between their time of cohabitation and time of first birth. It is presumed that those who were married with full bridewealth paid would have shorter intervals than those who are cohabiting. This is due to the reproductive restrictions full payment confers on women. Additionally, we hypothesize that men's higher fertility preferences in Ghana may suggest shorter birth intervals for women whose bridewealth has been paid. The recommended interval of 24 months per birth and birth intervals shorter than this, whether preceding or succeeding, have been associated with infant and maternal mortality (Fotso, Cleland, Mberu, Mutua, & Elungata, 2013; Marston, 2006). However, men who have fully paid the negotiated bridewealth may determine that more children are born within shorter intervals. In addition, cultural and normative sanctions may prevent women from using contraception when bridewealth has been paid to limit or space births (Horne et al., 2013)

DATA AND METHODS

We used the Women's and Birth's Files from the 2014 Ghana Demographic and Health Survey dataset to assess the relationship between bridewealth payment and age at first birth and preceding birth intervals, respectively. The Women's File contains information about the 9,396 women interviewed in the nationally representative survey while the Birth's File contains 23,118 births of women. The two dependent variables are *birth gap* which is the difference between the age at first birth and age at first cohabitation and the *preceding birth interval* which is measured as the number of months between women's various births. The independent variable, *bridewealth payment*, is a composite of three variables measuring the marital status of the respondent, whether bridewealth was negotiated, and the level or extent of bridewealth payment. Control variables used in the study differ for the two study objectives and are: *birth order*, *previous child's survival*, *maternal age* or *current age*, *education*, *ethnicity*, *household wealth*, *place of residence*, *partner's education*, and *partner age difference*.

RESULTS

The weighted sample of married and cohabiting women used for the first objective was 3,830. The "birth gap" or years between ages at first cohabitation and birth ranged from -24 to 17. Thus, women had their first births 24 years before¹ first cohabitation/marriage to 17 years after first cohabitation/ marriage among women who have been in only one union. Bivariate analysis results showed a significant difference in

¹ We also ran a model excluding births occurring prior to cohabitation/marriage in order to determine the duration till first birth after first cohabitation. Bivariate results were not significant and multivariate results were similar to results presented in Table 1. We chose to display these full results in order to show the entire relationship of Ghanaian women's first births and first cohabitation.

birth gap across bridewealth statuses (table not shown). Women whose bridewealth was partially or fully paid had the most years (1.07 years) between cohabitation and birth while those cohabiting had the least years (0.49 years). Linear regression results are indicated in Table 1 and show that bridewealth was not significantly associated with years since first birth. Other significant factors were ethnicity, place of residence, partner's education and wealth.

Table 1: Linear regression model showing association between birth gap and bridewealth status controlling for demographic, socio-economic and partner's characteristics

Characteristics	Linearized			Characteristics contd.	Linearized		
	Coef.	Std. Err.	P>t		Coef.	Std. Err.	P>t
Bridewealth Status				Household Wealth			
None/not negotiated (RC)	0.000			Poorest (RC)	0.000		
Partially Paid	0.300	0.326	0.357	Poorer	-0.194	0.145	0.180
Fully paid	0.292	0.273	0.285	Middle	0.104	0.205	0.612
Cohabiting	-0.203	0.266	0.447	Richer	0.299	0.288	0.300
Age	-0.006	0.010	0.521	Richest	0.530	0.319	0.098
Educational Attainment				Partner's Education			
None (RC)	0.000			None (RC)	0.000		
Primary	0.167	0.186	0.371	Primary	-0.346	0.198	0.081
Junior/Middle	0.025	0.232	0.915	Junior/Secondary/Higher	-0.464	0.180	0.010
Secondary/Higher	0.060	0.342	0.860	Don't Know	-0.540	0.512	0.292
Ethnicity				Age Difference Grouped			
Akan (RC)	0.000			Younger/same age (RC)	0.000		
Ga/Dangme	0.142	0.371	0.703	1-4 years older	0.462	0.344	0.180
Ewe	0.355	0.186	0.056	5-9 years older	0.220	0.352	0.532
Mole-Dagbani	0.374	0.195	0.056	10+ older	0.254	0.346	0.463
Other	0.151	0.219	0.491	Constant	0.837	0.554	0.132
Place of Residence							
Rural (RC)	0.000						
Urban	-0.394	0.205	0.055				

Note: R² value – 0.0158; (RC) – reference category; N=3,830

On the other hand, the second objective included results from 13,017 births among women who were currently in union (married or cohabiting) only once and ever had a birth. Single births were later removed because there were no previous births to calculate the birth interval resulting in 7,957 births as the weighted sample. The birth interval value ranged from 9 to 296 months and this was transformed to provide a normally distributed sample. Bivariate and multivariate results showed no significant difference across bridewealth statuses for all births. When births were split into decades – births in the 1980s, 1990s, 2000s and 2010s – bridewealth was still not significantly related to preceding birth intervals. The final results shown on Table 2 also indicate that birth order, previous child survival, maternal age, education, ethnicity, household wealth, partner's education, and age difference were significantly associated with birth intervals.

Table 2: Linear regression model showing association between birth intervals and bridewealth controlling for demographic, socio-economic, and partner characteristics

Characteristics	Linearized			Characteristics contd.	Linearized		
	Coef.	Std. Err.	P>t		Coef.	Std. Err.	P>t
Bridewealth Status				Place of Residence			
None/not negotiated (RC)	0.000			Rural (RC)	0.000		
Partially Paid	0.001	0.002	0.757	Urban	-0.002	0.002	0.291
Fully paid	-0.001	0.002	0.758	Household Wealth			
Cohabiting	0.000	0.002	0.974	Poorest (RC)	0.000		
Birth Order	0.009	0.001	0.000	Poorer	0.002	0.002	0.435
Previous Child Survival				Middle	-0.001	0.002	0.762
Yes	0.000			Richer	0.001	0.003	0.604
No	-0.005	0.001	0.000	Richest	0.012	0.004	0.001
Maternal Age	-0.003	0.000	0.000	Partner's Education			
Educational Attainment				None (RC)	0.000		
None (RC)	0.000			Primary	-0.004	0.002	0.041
Primary	-0.002	0.002	0.278	Junior/Secondary/Higher	-0.004	0.002	0.021
Junior/Middle	0.002	0.002	0.321	Don't Know	0.006	0.005	0.272
Secondary/Higher	0.010	0.003	0.002	Age Difference Grouped			
Ethnicity				Younger/same age (RC)	0.000		
Akan (RC)	0.000			1-4 years older	-0.010	0.003	0.001
Ga/Dangme	-0.004	0.003	0.285	5-9 years older	-0.011	0.003	0.000
Ewe	0.001	0.002	0.565	10+ older	-0.013	0.003	0.000
Mole-Dagbani	-0.006	0.002	0.001	Constant	0.259	0.005	0.000
Other	0.001	0.002	0.423				

R² value – 0.1611; (RC) – reference category; N=7,957

DISCUSSION

The cultural practice of bridewealth payment is not significantly associated with women's duration to first birth and women's birth intervals. Interesting results are that those cohabiting had their first births long before they began their first cohabiting relationship. This has implications for fertility in Ghana where traditionally births occur in stable relationships. The literature also argues that the expensive nature of bridewealth in modern times has delayed marriages and resultant births (Blum, 2007). Furthermore, women's participation in productive activities has increased with changing economic circumstances and increasing urbanisation compared to the past. This situation has probably eroded the effect of bridewealth on birth interval as men increasingly appreciate the need for increased birth interval in order for women to contribute to household needs (Yoder et al. 2013). Women's reproductive behaviours appear similar across bridewealth statuses, and other mechanisms, such as men's preference or pronatalist stance changing due to modernity, may be better predictors of the duration to first birth and shorter birth durations. Further studies on this subject may provide evidence to feed into the on-going discussion on lengthening of birth intervals and the postponement of births in sub-Saharan Africa (Moultrie, Sayi, & Timæus, 2012; Timæus & Moultrie, 2008).

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