

DETERMINANTS OF AGE AT FIRST MARRIAGE AMONG WOMEN IN WESTERN UGANDA

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This paper analyses the socio-economic determinants of low female age at first marriage in Western Uganda using data from the 2006 Uganda Demographic and Health Survey. The life table technique was employed to calculate median age at marriage, Log Rank chi-square to test for equality of the survival times and the proportional hazard model to study the effect of various socioeconomic variables, and to identify the magnitude and significance of their effects on the timing of first marriage. This study which used data from 715 ever married women from western Uganda aged 15-49, found that the median age at marriage was 17.4. Women's age at marriage varied by education level, occupation, ethnicity, age, district of residence and religion. Girls access to education and information on reproductive health should be emphasizes and providing them with basic life skills to enable them to avoid early marriage.

1. Introduction

Age at marriage is of particular interest because it marks the beginning of regular exposure to the risks of pregnancy and childbearing hence affecting fertility levels and population growth especially in countries with low contraceptive rate. Marriage forms the basis of family formation and, as such, is an important determinant of fertility by increasing or decreasing duration of exposure to the risk of childbearing. Women who marry early will have, on average; a longer period of exposure to the risk of pregnancy, often leading to higher completed fertility. Variation in age of entry into marriage helps explain differences in fertility across populations and also helps explain trends in fertility within individual populations over time [1], [2]. Therefore, age at first marriage has a direct bearing on fertility behaviour [3], [4], [5].

Early marriage is common in much of the developing world, adolescent and child marriage continues to be a strong social norm, particularly for girls. It is associated with early childbearing, in most cases particularly in the developing world; the main purpose of marriage is to have children. Delayed age at marriage directly affects completed fertility by reducing the number of years available for childbearing. A delayed marriage may affect fertility indirectly due to some contributory factors linked with higher age at marriage, such as women's education, which may relate to family size preferences and use of contraception [6],[7],[8],[9][10].

In Uganda, marriage is almost universal sooner or latter, everyone marries, an early age at first marriage is observed for both males and females. According to the 1995, 2000/01 and 2006 Uganda Demographic and Health Surveys, the age at first marriage has been 17.5, 17.8 and 17.8 respectively and coupled with a low contraceptive prevalence rate of 24%, they have led to a high total fertility rate of 6.9.

In the effort to increase the age at first marriage, Uganda has tried to intervene by setting the minimum legal age for a woman to get married at 18 years and through emphasis on educating the girl child through a number of educational reforms instituted since 1990 [11]. However, not all girls of school going age are enrolled in schools, there are high girl child drop-out rates and entry into marriages at early ages is still high. According to the 2002 Uganda Population and Housing Census 6,308,849 girls marry below 16 years [12] and this leads to low education attainment among women and unplanned pregnancies and high fertility.

Having realized that there is no related study that has been carried out in the Western Region and the differentials and socio-economic determinants of age at first marriage in the Western Region are not known, the study was conducted to establish the differentials and determinants of age at first marriage in Western Region.

2. Data and methods

2.1 Data:

The study used data from the survey entitled "Uganda Demographic and Health survey" which was conducted by Uganda Bureau of Statistics in conjunction with Macro International (UBOS/ORC Macro, 2006). The survey questionnaires included questions on the household

composition, facilities and belongings. A total of 931 women in the reproductive age group 15-49 were successfully interviewed 715 had ever been married and 216 had never. In addition, information on socio-economic variables and age at first marriage were collected from all women. Furthermore, this survey uses a representative sample.

2.2 Description of variables

2.2.1 Dependent variable

The dependent variable is age at first marriage measured in terms of completed years. During the survey all women were asked a series of questions regarding their marital status and whether they had ever lived with a man. All those who reported that they were ever married or ever-lived with a man, were asked to indicate how old they were at the time when they started living with a man as a wife, irrespective of the legality or otherwise of their union. The response to this question constituted the woman's age at first marriage. All the women who indicated that they had never been in a union or lived with a man were considered single and as a result they were not asked the question about the age at first marriage.

2.2.2 Independent variables

The independent variables include a host of socio-economic factors. The factors that were examined included women's education, religion, occupation, place of residence, wealth, district of residence and ethnicity.

Women's education level refers to their completed level of education and was categorized as no education, primary, secondary and higher education. *Religion* was categorized into four categories: Catholics, Protestants, Muslims and others. *Occupation*, another variable considered in this study was categorized into agriculturalists, not employed, professionals, laborers and traders. Two categories are considered for *place of residence*: rural and urban. *Wealth* was categorised as poor, poorer, middle, richer and richest groups.

The 2006 UDHS defined Western region to include the 9 *districts* of Buliisa, Bundibugyo, Hoima, Kabarole, Kamwenge, Kasese, Kibaale, Kyenjojo, and Masindi.

The major *ethnic* groups in Western Uganda are Banyoro/Batoro who are the natives, Banyankole/Bakiga Baganda, Luo. There is a residual group of other ethnic groups (Others)

2.3 Methods:

At Univariate level, frequency distributions were done for age, district distribution, marital status, religion, rural urban residence, and educational level, occupation, religion and wealth variables.

The life table technique was also employed to compute the median age at first marriage for the different characteristics of women.

At *bivariate level*, the Log Rank chi-square was used to test for equality of the survival times.

The log rank Chi Square was used to test if there is a significant difference between ages at first marriage among women of different socio-economic characteristics.

Age at first marriage was tested with each of the independent variable considered in the model in order to assess whether or not the variations were statistically significant. The level of significance was at 0.05 that is at a confidence interval of 95%.

The *Cox's proportional hazard model* to model the determinants of age at first marriage was used.

The model is generally described as:

$$h(t; x_1 \dots x_n) = h_o(t) \exp(b_1 x_1 + \dots + b_n x_n)$$

Where

$h(t \dots)$ = Resultant hazard,

$x_1, x_2 \dots x_n = n$ Covariates for the respective case

And

t = Age at first marriage

The term $h_o(t)$ is called the baseline hazard; it is the hazard for the respective individual when the values of all the covariates are equal to zero.

In this analysis, a variable is reported as having a significant effect, if its effect on the timing of marriage is statistically significant at least at the 5 per cent level of significance.

3. RESULTS

At bivariate level, it was found out that age at first marriage varies by education level, religion, ethnicity, district of residence and occupation. However, it does not vary by residence and wealth index.

Table 1 Results of Cox's Proportional hazard model analysis for female's age at first marriage according to female's characteristics

Female's Characteristics	Standard error		P value	Hazard Ratio
Education level				
No education				1.000
Primary education	0.0753	-2.14	0.037*	0.822
Secondary education	0.1122	-2.44	0.016*	0.664
Occupation				
Unemployed				1.000
Agriculturalists	0.1634	-1.54	0.134	0.697
Traders	0.1971	-1.24	0.388	0.708
Professionals	0.1321	-2.74	0.005*	0.436
Labourers	0.2706	-0.73	0.282	0.775
Religion				
Muslims				1.000
Catholics	0.1416	-1.52	0.125	0.751
Protestants	0.1316	-1.90	0.097	0.700
Others	0.1327	-2.15	0.015*	0.639
District of residence				
Kibale				1.000
Bundibugyo	0.1656	-0.64	0.573	0.887
Hoima	0.1413	-0.56	0.308	0.918
Kabarole	0.1014	-3.04	0.002*	0.596
Kasese	0.1349	-0.98	0.327	0.857
Masindi	0.1692	-1.10	0.182	0.790
Kamwengye	0.1297	-1.91	0.056	0.704
Kyenjojo	0.0747	-4.69	0.000*	0.487
Age				
15-29				1.000
30-39	0.0733	-2.29	0.000*	0.813
40-49	0.0786	-3.06	0.015*	0.715
Log likelihood	-4041.1			
Chi-square	80.27			
Degrees of freedom	24			
Sample	931			
Censored	216			

Note significance: * p<0.05

3.1 Age at first marriage and Education level

The risk of first marriage was 18 percent lower for the women with primary education and 34 percent lower for women with at least secondary education, all compared with women with no education. For example, at least secondary education delayed first marriage for 1.16 years. The significance level for all education categories were significant and thus risk of getting married reduced as the level of education increased. These results provide empirical evidence that a woman's educational attainment is an important determinant of a women's age at first marriage in Western Uganda. More education leads to delayed marriage and therefore higher levels of education are associated with a lower probability of early marriage. Each additional level of education lowers the probability of first marriage significantly. These results are consistent with those reported earlier in the literature.

The results obtained clearly showed that education has a statistically significant and strong delaying effect on marriage. The effect remained robust in the presence of a number of controls. A lower risk of getting married early among educated women may be due to waiting time for schooling, finding a match and for getting white collar jobs.

3.2 District's effect on age at first marriage

District of residence has a significant effect on age first marriage in Western Uganda. With this regard, the risk of first marriage was 51 percent lower for the women in Kyenjojo district, 40 percent lower for women in Kabarole district, all compared to women in Kibale district. Compared with the women in Kibale district, the risk of first marriage was not statistically different for women in the other districts of Bundibugyo, Hoima, Kamwengye, Kasese and Masindi. The ethnicity of people who reside in Kyenjojo and Kabarole district is mainly Batooro and the reasons for higher ages among women in these districts could be the higher education levels.

3.3 Birth cohort and age at first marriage

The year of birth is significantly associated with early age at first marriage. Women born in the older generations were less likely to marry early compared to those born more recently indicating the likelihood of entering a marriage early is increasing. For example, women born between 1957 and 1966 and those born between 1967 and 1976 were 0.715 and 0.813 times respectively as likely as those born between 1977 and 1991 to marry early. This shows that younger women

are more likely to marry early compared to older women. These results indicate an increasing trend in the occurrence of early marriages in Western Uganda. Women aged 40-49 and 30-39 had a slightly lower risk of first marriage compared to those aged 15-29.

This is quite different from what was found out in other studies which showed an increasing trend in age at first marriage as the year of birth reduced. This means there is a reduction in age at first marriage in Western Uganda. However, this could be due to high number of censored cases among women born between 1977 and 1991.

4 Conclusions

Basing on the findings in the previous chapter, it was found out that educational attainment, religion, district of residence and birth cohort were strong socio-economic determinants of age at first marriage in Western Uganda. This is evidenced by both the findings at bivariate and multivariate analysis with p-values less than 0.05.

Furthermore, occupation and ethnicity were significant at bivariate level of analysis but not significant at multivariate level. While place of residence and wealth index had no relationship with age at first marriage of these women in Western Uganda.

All in all, the study has established that a women of other religions who had atleast primary education, resided in Kyenjojo and Kabarole district, and were born between 1960 and 1989 were more likely to marry later compared to their counterparts in Western Uganda.

5 Recommendations

This study has implications for policies and programs that seek to increase women's age at first marriage. It is crucial to continue improving girls and young women access to education in the region, as this is important avenue for raising the women's age at first marriage and for empowering women and enhancing their participation in market economy.

Similarly, it is advisable to target young women, particularly those with no or little education, with information on reproductive health and to provide them with basic life skills to enable them to avoid early marriage. These should include primary school girls. These programs should emphasise the health as well as the economic advantages of delayed marriage and childbearing.

More research needs to be done to find the pathways through which education influences the timing of marriage. Similarly, interactions between and among the covariates included in this study should be investigated. Future studies on this subject should endeavour to seek for the pathways and investigate interactions between and among covariates.

REFERENCES

1. United Nations. (1990). Patterns of First Marriage: Timing and Prevalence. New York: United Nations, Department of International Economic and Social Affairs.
2. Ezeh, A.C., & Dodo, F.N. (2001). Institutional change and African fertility transition
3. Davis, K, & Blake, J. (1956). Social structure and fertility: an analytic framework. Economic Development and Cultural Change, 4, (3): 211-235.
4. Coale, A. (1971). Age patterns of marriage. Journal of Population Studies, 25, (2): 193-214.
5. Bongaarts, J. (1983). A framework for analysing the proximate determinants of fertility Population and Development Review, 4, (1): 105-132.
6. Agyei, W.K.A., & Mbamanya, J. (1989). Determinant of cumulative fertility in Kenya. Journal of Bio Social Science, 21, (2): 135-144
7. Amin, S. (1995). Female education and fertility in Bangladesh: The Influence of marriage and the family. In Girl's Schooling, Women's Autonomy and Fertility Change in South Asia,
8. Tushabe, B. (1997). The socio-economic and demographic determinants of fertility levels in Uganda: A case study of Western Uganda. (MA) Dissertation, Department of Population Studies, Makerere University, Uganda.
9. Jensen, R., & Thornton, R. (2003). Early female marriage in the developing World. In Gender, Development and Marriage, Caroline Sweetman, editor. Oxfam GB, Oxford, UK
10. Asiimwe, I. (2008). The role of women's education in determining fertility in the central region of Uganda. (MA) dissertation, Department of Population Studies, Makerere University, Uganda.
11. Ministry of Education and Sports (2003). The proposed strategic plans for higher education 2003-2015.
12. Uganda Bureau of Statistics (UBOS) and Macro International Inc. (2007): Uganda Demographic and Health Survey 2006. Calverton, Maryland, USA: UBOS and Macro International Inc