

# **CHANGES IN AGE AT FIRST MARRIAGE AND ASSOCIATED FACTORS IN MALAWI: EVIDENCE FROM MALAWI DEMOGRAPHIC AND HEALTH SURVEY DATA 1992-2016**

## **Abstract**

The objectives of this study is to identify the trend in age at first marriage among women and its related social and demographic factors. We used Malawi Demographic and Health Survey from 1992 to 2016 to explore this objectives while the target population are women of reproductive age. To identify main effects of variables associated with age at marriage, Cox proportion hazard modelling was used without interactions. Women's age, place of residence, education, region, religion, employment and wealth index were included in the analysis. The median age at first marriage during the period of 1992 to 2016 remained constant at 17 years. Age at first marriage is significantly positively associated with women's age, education, place of residence, religion, and negatively associated with employment status and wealth index. Health and social policies should be directed towards public awareness of socio-demographic factors associated with early and delayed marriage in Malawi.

## **Introduction**

Even though level of child marriage is declining globally, a substantial proportion of teenagers in sub-Saharan Africa still marry before their 18<sup>th</sup> birthday (Erulkar, 2013).

It is against the backdrop of the foregoing effects of age at first marriage that we undertake the present study. The aim of the study is to examine the effect of selected socio-demographic factors on changes in the age at first marriage in Malawi. Many studies in the past have examined this problem of early marriage in sub-Saharan Africa, however, they are almost predominantly cross sectional in nature. This is the void in the existing literature the present study seeks to fill. Specifically, the present study goes beyond existing studies by using five waves of the demographic and health survey data on Malawi to examine the trend in age at first marriage.

## **Review of the Empirical Literature**

Although age at first nuptial is a key aspect of the development of future life course for both gender, research on this subject has mostly focused on the female population probably because the implications of early marriage are more pronounced in the female population. But, despite the narrow focus on females, empirical evidence on the topic indicates that background characteristics such as age, level of education, income, religion, ethnicity and place of residence may explain variations in the timing of marriage, particularly as it pertains to early nuptials.

The timing of marriage has been found to be a function of age. In most countries, there are legal prescripts delineating the minimum age at which individuals are deemed mature enough to enter into a marital union. However, due to variations in national laws, marriage traditions and kinship systems, the average age at first marriage varies significantly within and between regions (Farooq & Deen, 2016). Generally, early marriage is more common in developing regions of Africa and South Asia (Farooq & Deen, 2016; Mensch et al., 2005; Singh & Samara, 1996). The trend in Africa suggests that the average age at first marriage is lower among younger women (15-19 years) compared to older women (35-39 years) (Adebowale et al., 2012; Garenne, 2004; Kumchulesi et al., 2011; Palamuleni, 2011).

Moreover, variations in age at first marriage are generally gendered as research has reported a higher prevalence of early marriages among women. Global trends suggest that the African region has a bigger gender disparity in the timing of marriage (UN, 2000). On average, women marry at relatively younger ages than men (Farooq & Deen, 2016; Singh & Samara, 1996). More women marry in their adolescent years (before 20 years) than men (Mensch et al., 2005). Even within the African region, the gender disparity varies across countries. For

instance, in Malawi, the median age at first marriage is 18.2 years for women and 23.0 years for men age 25-49 (NSO & ICF, 2017).

According to human capital theory, socio-economic development – that is increased education, employment and wealth – has positive influences on the timing of marriage. Generally, it has been found that as the levels of education, income and employment increase, nuptial age increases for both males and females (Saadati & Bagheri, 2017). Most studies focusing on the correlation between education and age at first marriage among women have consistently found a strong positive effect of educational status on women's age at first marriage. The general conclusion is that women with greater educational attainment or commitment (at least a secondary level education) tend to delay or postpone marriages compared to those with little to no education (Agaba et al., 2010; Aktar et al., 2017; Farooq & Deen, 2016; Ikamari, 2005; Jisun, 2016; Kamal, 2011; Manda & Meyer, 2005; Sheela & Audinarayana, 2000; Singh & Samara, 1996; Wong, 2005).

Additionally, parental education level has been identified as positively influencing timing of marriage, particularly for girls, as it contributes to the delay in early marriage of young girls (Bates et al., 2007; Gangadharan & Maitra, 2003; Haloi & Limbu, 2013; Nur & Mberia, 2016; Smith et al., 2012). Thus, parents with some education are more likely to emphasize the educational attainment of their children rather than try to marry them off. Although the relationship between education and delayed marriage may be complex, the importance of education in increasing the female age at marriage is widely recognized in the literature as prolonged schooling results in a delay in marital timing. Thus, the longer people, especially women, stay in school, the less likely they are to be married at an early age.

Similarly, the employment and wealth statuses of women have been found to have a significant delaying effect on their timing of marriage. Women who work or have strong employment commitments tend to delay the process of looking for a suitable groom, resulting in substantial postponement in the timing of marriage (Aktar et al., 2017; Kamal, 2011; Wong, 2005). Wealth status, measured by household income, plays a significant and positive role in the timing of marriage as poverty increases the likelihood for early marriage (Haloi & Limbu, 2013; Jisun, 2016; Nur & Mberia, 2016; Singh & Samara, 1996). Thus, women from poor families and those who are unemployed are more prone to early marriage compared to their affluent and employed counterparts.

Other explanatory variables for the variation in female age at first marriage include place of residence, religion and ethnicity. Studies focused on urban-rural differences in marital timing within countries have indicated urbanization as an important predictor of female age at

first marriage. In general, urban women have been found to be less likely to marry early compared to rural women (Adebowale et al., 2012; Ezra, 2003; Ikamari, 2005; Jisun, 2016; Kumchulesi et al., 2011; Singh & Samara, 1996). The relationship between urban residency and delayed marriage is predictable as urban residents are often more exposed to more and better education, modern values and attitudes as well as have access to paid employment than rural residents.

Ethnicity has also been found to be an important predictor of age at first marriage in a number of studies (Booth, 2010). Ethnic differentials in the timing of marriage have been observed in Bangladesh (Kamal, 2011), Ethiopia (Ezra, 2003), Mozambique (Arnaldo, 2004), as well as in Uganda and South Africa (Ayiga & Rampagane, 2013).

Finally, a number of studies have shown that religion has a profound impact on age at marriage. Sheela and Audinarayana (2000) found religion to exert a strong influence on age at first marriage of Indian women, where Christian women were likely to marry later compared to Hindu and Muslim women. Jisun (2016) found Muslim women in Bangladesh got married earlier compared to non-Muslims. Ezra (2003) found that compared to Protestants, believers of other Christian sects and traditional religions in Ethiopia are more likely to marry before their 18th birthday. In Nigeria, Muslim women were found to marry earlier compared to Christians women (Adebowale et al., 2012). Contrary to the protective effect of some religions on early marriage, Ikamari (2005) did not find religion to be an important determinant of the timing of first marriage in Kenya.

## **Data and Methods**

The data source for this study were drawn from the individual files of women of reproductive ages, 15 to 49 years old for the survey periods 1992, 2000, 2004-05, 2010 and 2015-16 of the Malawi Demographic and Health Surveys (MDHS) data. Besides such demographic information as age at first marriage, age at first sexual intercourse, age at cohabitation, age at first birth, marital duration, total number of children ever born, the surveys collected information such background characteristics as education, ethnicity, religion, place of residence, region of residence, health service providers, communities, and household health expenditures of the women.

The outcome variable for this study is age at first marriage while the explanatory variables of interest are of educational attainment, religious affiliation, and place of residence, wealth status, employment and region of residence. We employ survival analysis using Cox proportional hazard regression to model the effect of the socio-demographic factors of interest

on the age at which respondents first got married estimate age at first marriage. Specifically, we calculate survival functions describing the probability of respondents who are married and their age at first marriage and those who are single. Reported age at first marriage is the failure of event and those who are single are censored at their current age. All data are weighted and analyzed using Stata 15 version.

The Cox proportion hazard model is used to assess the effect of socio-demographic factors on age at first marriage of women in Malawi. The Cox model is written as:

$$h(t) = h_0(t) \times \exp\{b_1x_1 + b_2x_2 + \dots + b_px_p\}$$

Where the hazard function  $h(t)$  is the dependent variable, which is dependent on a set of  $p$  covariates  $(x_1, x_2, \dots, x_p)$  whose impact is measured by the size of the respective coefficients .

$(b_1, b_2, \dots, b_p)$ . The term  $h_0$  is the baseline hazard, which gives the value of the hazard if all the  $x_i$  are equal to zero

A variable is reported as having significant effect, if its effect on age at first marriage is statistically significant at least at the 5% level of significance.

## Results

The information on the socio-demographic characteristics of women age 15-49 years are presented in Table 1. The table shows that there is inconsistent distribution of women by place of residence. For instance, the proportion of women living in rural areas increased from 72.9% in 1992 to 87.6% in 2004/05. However, this proportion decreased from 86.7% in 2010 to 78.6% in 2015/16. There is also inconsistent distribution of the proportion of women by region. For example, the rate women residing in the Southern region increased from 37.2% in 1992 to 51.7% in 2004/05. But the proportion decreased from 47.6% in 2010 to 46.2% in 2015/16.

Table 1 also shows that there is an improvement in women's enrolment in school. For instance, the proportion of uneducated women decreased from 37.8% in 1992 to 11.3% in 2015/15. Moreover, there was an improvement in the labour force pation rate of women during

this period of the surveys as the proportion of women not working decreased from 71.1% in 1992 to 38.7% in 2015/16.

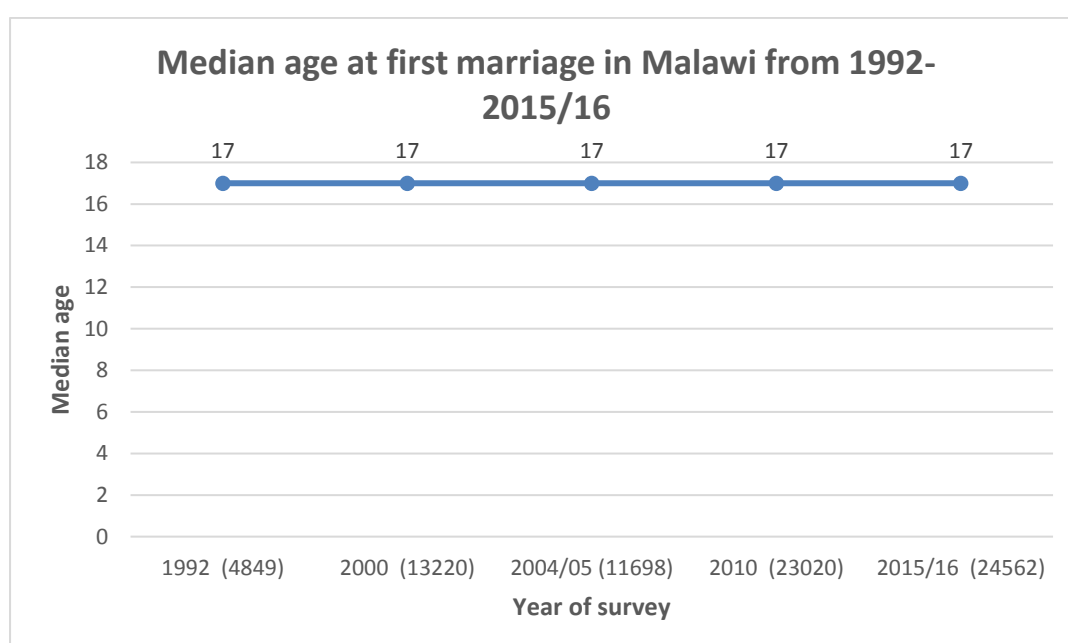
Even though there was no information on religion affiliation in the 1992 survey, the proportion of women who belong to other religion decreased from 1.4% in 2000 to 0.6% in 2015/16. Similarly, while there was no information on wealth index in the 1992 and 2000 surveys, the proportion of women in the rich wealth index increased from 37.6% in 2004 to 46.2% in 2015/16.

**Table 1: presents the main characteristics of the respondents**

<b>Characteristics</b>	1992 n = 4849 (%)	2000 n = 13220 (%)	2004-05 n= 11698 (%)	2010 n = 23020 (%)	2015-16 n =24562 (%)
<b>Age</b>					
15-19	1105 (22.8)	2914 (22.0)	2407 (20.6)	5029 (21.9)	5273 (21.5)
20-24	986 (20.4)	2998 (22.7)	2824 (24.1)	4386 (19.1)	5094 (20.7)
25-29	801 (16.5)	2358 (17.8)	2136 (18.3)	4306 (18.7)	3976 (16.2)
30-34	666 (13.5)	1574 (11.9)	1492 (12.8)	3284 (14.3)	3648 (14.9)
35-39	517 (10.7)	1410 (10.7)	1129 (9.7)	2569 (11.2)	2988 (12.2)
40-44	458 (9.5)	1052 (8.0)	940 (8.0)	1775 (7.7)	2022 (8.2)
45-49	313 (6.7)	914 (6.9)	770 (6.6)	1629 (7.1)	1561 (6.4)
<b>Residence</b>					
Urban	1316 (27.1)	2871 (21.7)	1640 (14.0)	3068 (13.3)	5247 (21.4)
Rural	3533 (72.9)	10349 (78.3)	10058 (86.0)	19952 (86.7)	19315 (78.6)
<b>Education</b>					
No Primary	1834 (37.8)	3372 (25.5)	2731 (23.5)	3390 (14.7)	2779 (11.3)
Primary	2633 (54.3)	8219 (62.2)	7282 (62.2)	15339 (66.6)	15028 (61.2)
Secondary	369 (7.61)	1608 (12.2)	1617 (13.8)	3970 (17.3)	6061 (24.7)
Higher	13 (0.3)	21 (1.6)	68 (0.6)	321 (1.4)	694 (2.8)
<b>Region</b>					
Northern	1442 (29.7)	2187 (16.5)	1265 (12.9)	4189 (18.2)	4803 (19.6)
Central	1606 (33.1)	4508 (34.1)	3470 (35.4)	7862 (34.2)	8417 (34.3)
Southern	1801 (37.2)	6525 (49.4)	5061 (51.7)	10969 (47.6)	11342 (46.2)
<b>Religion</b>					
Catholic	NA	2974 (22.5)	2575 (22.0)	4670 (20.3)	4320 (17.6)
Other Christian	NA	8173 (61.8)	7175 (61.4)	15614 (67.8)	17365 (70.7)
Muslim	NA	1888 (14.3)	1816 (15.5)	2530 (11.0)	2726 (11.1)
Others	NA	181 (1.4)	127 (1.1)	206 (0.9)	151 (0.6)
<b>Employment</b>					
Not working	3446 (71.1)	5704 (43.2)	5114 (43.7)	9928 (43.2)	9502 (38.7)
Working	1400 (28.9)	7512 (56.8)	6576 (56.3)	13050 (56.8)	15060 (61.3)
<b>Wealth index</b>					
Poor	NA	NA	4409 (37.7)	9022 (39.3)	8708 (35.4)
Middle	NA	NA	2517 (21.5)	4713 (20.5)	4508 (18.4)

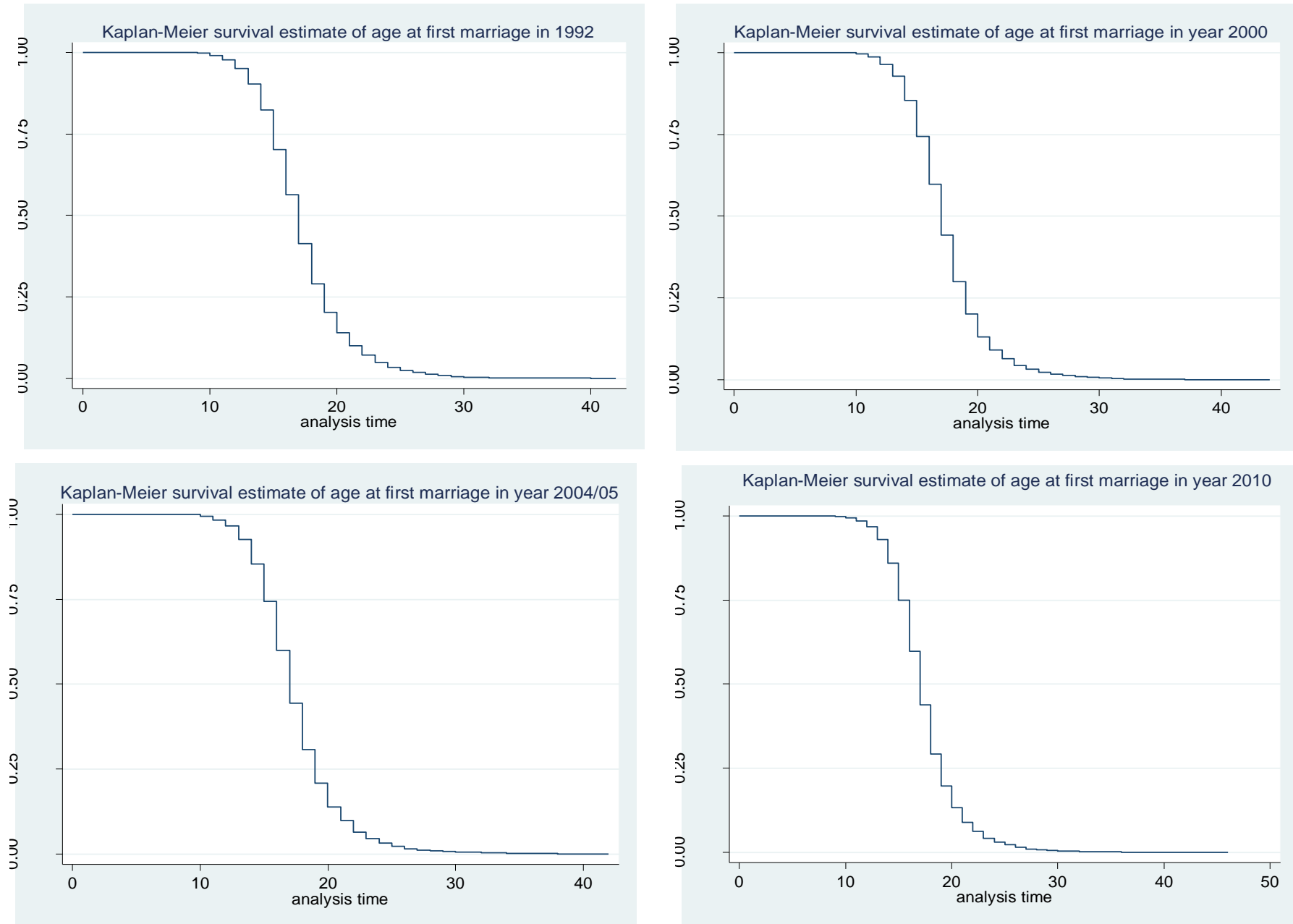
Rich	NA	NA	4772 (37.6)	9243 (40.2)	11346 (46.2)
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**Figure 1: Median age at first marriage among women 15-49 year in Malawi from 1992-2015/16**



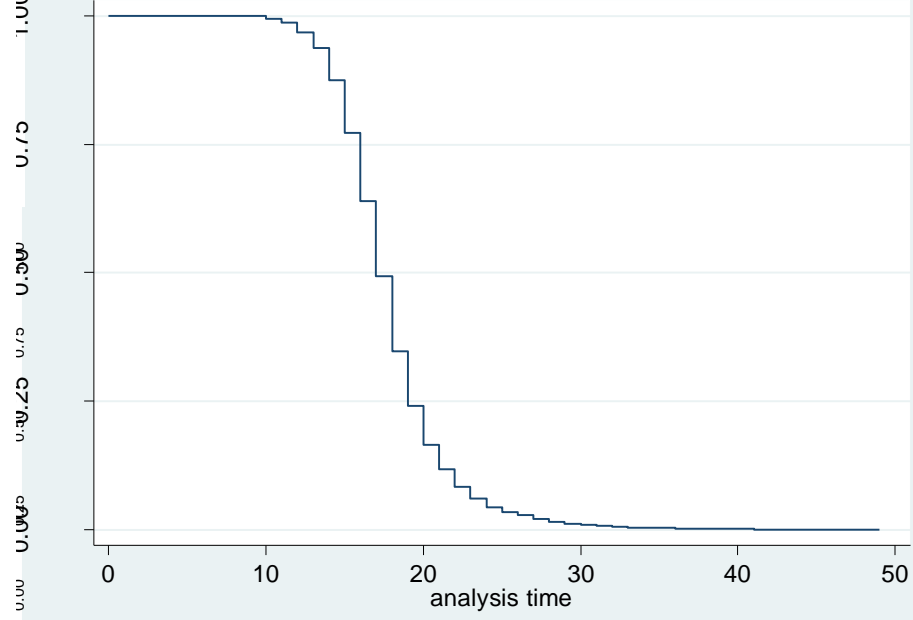
The graph in Figure 1 shows that age at first marriage in Malawi has remained constant at 17 years over a period of five surveys.

**Figure 2: Kaplan Meier survival estimate of time to age at first marriage among women of reproductive age from 1992 -2015/16 in Malawi**





Kaplan-Meier survival estimate of age at first marriage in year 2015/16



analysis time

Figure 2 shows that in all the five surveys, the age at first marriage for women between the ages of 15-49 years starts from 8 years up until after the age of 40 years.

### **Trends and differentials in age at first marriage**

The trends and differentials in the median age at first marriage by selected socio-demographic characteristics of women in Malawi are shown in Table 2. An examination of the data for various characteristics of women in Malawi reveals that with little exception, the trends in age at first marriage have followed the same general pattern across place of residence, education, religion, and region, wealth index and employment status.

It is observed that age at first marriage among women 15-19 remain constant at 16 years from 1992 to 2016. Meanwhile, among women 25-29, 30-34, and 35-39 years, age at first marriage remained at 17 years from 1992 to 2010. However, it increased to 18 years in 2016. Pattern of age at first marriage remained the same for women within the ages of 40-44 and 45-49 in all the five surveys. The differentials in ages at first marriage by age groups show that the median age at first marriage was lowest (16 years) among women 15-19 years while women in the ages of 40-44 and 45-49 years have the highest (18 years) age at first marriage.

With regards to place of residence, the median age at first marriage increased from 17 years from 1992 and 2000 to 18yrs in 2004/05, 2010, and 2015/16 in urban areas. While the median age at first marriage in rural areas remained the same from 1992 to 2015, they had the lowest median age at first marriage compared to their counterpart in urban areas.

Women with secondary education and higher education have higher median age at first marriage. However, surprisingly, the trend in median age at first birth decreased from 20 years in 1992 to 19 years in 2000 and 2010 and it also decreased from 20 years in 2010 to 19 years in 2015/16. The differentials in age at first marriage by level of education shows that the median age at first marriage is lowest at 17 years for women without education and women with primary education.

As far as the effect of region is concerned, Table 2 shows that the median age at first marriage was 17 years from 1992 to 2010 for both the Northern and Central regions and only increased to 18 years in 2015. However, the median age at first marriage remained the same at 17 years from 1992 till 2015 in the Southern region.

With respect to employment status, there were no changes in median age at first marriage from 1992 to 2015 in terms of respondents that were not working. However, for

women in the labor force, there were no changes between 1992 and 2004. The median age at first marriage increased from 17 years from 1992-2004 to 19 years but decreased to 17 years in 2015.

**Table 2: Trends and Differentials in median age at first marriage and Socio-demographic characteristics among women age 15-49 years.**

Characteristics	1992 (%)	2000 (%)	2004-05 (%)	2010 (%)	2015-16 (%)
<b>Age</b>					
15-19	16	16	16	16	16
20-24	17	17	17	17	17
25-29	17	17	17	17	18
30-34	17	17	17	17	18
35-39	17	17	17	17	18
40-44	18	17	17	17	18
45-49	18	17	17	17	18
<b>Place of residence</b>					
Urban	17	17	18	18	18
Rural	17	17	17	17	17
<b>Education</b>					
No education	17	17	17	17	17
Primary	17	17	17	17	17
Secondary	20	19	19	20	19
tertiary	22	22.5	23	22	23
<b>Region</b>					
<b>Northern</b>	17	17	17	17	18
Central	17	17	17	17	18
Southern	17	17	17	17	17
<b>Religion</b>					
Catholic	.	17	17	17	18
Other Christians	,	17	17	17	17
Muslim	,	17	17	17	17
Others	,	16	17	<b>17</b>	17
<b>Employment status</b>					
<b>Not working</b>	17	17	17	<b>17</b>	17
Working	20.5	17	17	17	17
<b>Wealth index</b>					
Poor	.	.	17	17	17
Middle	.	.	17	17	17
Rich	.	.	17	17	18

## **The Multivariate analysis**

The results of the Cox regression analysis are shown in Table 3. The table shows that age and education were the only variables associated with age at first marriage in Malawi in the 1992 survey. In the 2000 survey, age, education and region variables were significantly associated with age at first marriage in Malawi. With regards to 2004/05 and 2010 surveys, age, education, region and religion were found to be significantly associated with age at first marriage in that country. In 2015/16 survey, age, place of residence, education, and region were found to be significantly associated with age at first marriage in Malawi.

Table 3 shows that the only factor which has consistent effect on age at first marriage in Malawi in all the surveys is age. From the table 3, the hazard of marrying early consistently decrease as the age of women increase in all the years of surveys. For instance, the hazard risk of early marriage is 0.57, 0.52, 0.49, 0.51, and 0.55 times lower among women between the ages of 30-34 years compared to women between the ages of 15-19 years in 1992, 2000, 2004/05, 2010, and 2015/16 surveys respectively.

The hazard of marrying early is 0.54 times lower among women who have secondary education compared to women with no formal education in 1992. However, secondary education is the only significant category of education in 1992 survey. In the 2000 survey, the hazard of marrying early is 0.51 and 0.36 times lower among women who have secondary and tertiary education respectively compared to women with no formal education. In 2004/05 survey, the hazard risk of marrying early is 0.91, 0.49 and 0.36 times lower among women with primary, secondary and tertiary education respectively compared to women with no formal education. In 2010 survey, the hazard risk of marrying early is 0.48 and 0.36 times lower among women with secondary and tertiary education respectively compared to women with no formal education. In 2015/16 survey, the hazard risk of marrying early is 0.55 and 0.35 times lower among women with secondary and tertiary education respectively compared to women with no formal education.

Regarding place of residence, 2015/16 is the only survey where the association between place of residence and age at first marriage is significant. For example, the hazard risk of marrying early is 1.08 times higher among women residing in rural areas compared to women residing in urban areas. Similarly, 2010 is the only survey where the association between religion affiliation and age at first marriage is significant. For instance, in 2010 survey, the

hazard risk of marrying early is 1.06 times higher among women with Muslim religion affiliation compared to women who are Catholic.

Surprisingly, employment status and wealth index reflects negative effect on age at first marriage in our study. For example, women who are working have 1.06, 1.06, and 1.09 times hazard or marrying early in 2000, 2010, and 2016 respectively compared to women who are not working. Similarly to employment status, our analysis shows the effect of wealth index on age at first marriage. Results from Table 3 shows that in 2010 survey, the hazard of marrying early is 1.04 and 1.05 times higher among women who are in the middle and rich wealth index compared to women in the poor wealth index. Also in 2015/06 survey, the hazard of marrying early is 1.07 and 1.09 times higher among women who are in the middle and rich wealth index compared to women in the poor wealth index

**Table 3: Cox proportional hazard regression of age at first marriage among selected socio-demographic variables in Malawi from 1992-2015/16**

	<b>1992</b>		<b>2000</b>		<b>2004/05</b>		<b>2010</b>		<b>2015/16</b>	
	Hazard ration	Confidence interval	Hazard ration	Confidence interval	Hazard ration	Confidence interval	Hazard ration	Confidence interval	Hazard ration	Confidence interval
<b>Age</b>										
15-19	1		1		1		1		1	
20-24	0.66	0.58-0.74*	0.63	0.58-0.67*	0.68	0.62-0.73*	0.68	0.64-0.73*	0.69	0.65-0.73*
25-29	0.55	0.49-0.62*	0.54	0.51-0.59*	0.55	0.50-0.59*	0.58	0.54-0.61*	0.60	0.57-0.64*
30-34	0.57	0.51-0.65*	0.52	0.48-0.56*	0.49	0.45-0.53*	0.51	0.48-0.55*	0.55	0.51-0.58*
35-39	0.47	0.41-0.54*	0.47	0.43-0.51*	0.47	0.43-0.52*	0.45	0.42-0.48*	0.49	0.45-0.52*
40-44	0.42	0.35-0.46*	0.50	0.45-0.54*	0.46	0.42-0.50*	0.46	0.43-0.49*	0.42	0.39-0.45*
45-49	0.40	0.35-0.46*	0.41	0.37-0.45*	0.39	0.35-0.43*	0.43	0.40-0.47*	0.37	0.35-0.40*
<b>Residence</b>										
Urban	1		1		1		1		1	
Rural	1.03	0.93-1.15	0.98	0.93-1.04	1.05	0.98-1.11	1.01	0.97-1.05	1.08	1.04-1.14*
<b>Education</b>										
No Primary	1		1		1		1		1	
Primary	0.97	0.90-1.03	0.96	0.93-1.00	0.91	0.87-0.96*	0.94	0.91-0.98*	0.99	0.94-1.03
Secondary	0.54	0.44-0.66*	0.51	0.46-0.55*	0.49	0.45-0.53*	0.48	0.46-0.51*	0.55	0.52-0.58*
Higher	0.50	0.21-1.19	0.36	0.19-0.62*	0.36	0.27-0.48*	0.36	0.27-0.35*	0.35	0.32-0.39*
<b>Region</b>										
Northern	1		1		1		1		1	
Central	0.94	0.85-1.05	0.82	0.78-0.88*	0.81	0.76-0.87*	0.87	0.83-0.92*	0.92	0.88-0.97*
Southern	0.96	0.87-1.07	0.94	0.88-1.01	0.92	0.86-0.98*	0.99	0.94-1.04	1.05	1.00-1.10*
<b>Religion</b>										
Catholic	N/A		1		1	1	1		1	
Other Christian			1.01	0.96-1.06	0.97	0.93-1.02	1.01	0.97-1.05	1.00	0.96-1.04
Muslim			0.94	0.88-1.00	0.97	0.90-1.04	1.06	1.01-1.12*	0.97	0.92-1.03
Others			0.98	0.85-1.13	0.84	0.70-1.01	1.06	0.94-1.21	0.98	0.83-1.15

<b>Employment</b>										
Not working	1		1		1		1		1	
Working	1.04	0.97-1.11	1.06	1.24-1.11*	1.03	0.99-1.08	1.06	1.00-1.09*	1.09	1.05-1.12*
<b>Wealth index</b>										
Poor	N/A		N/A		1		1		1	
Middle					1.01	0.95-1.06	1.04	1.00-1.09*	1.07	1.03-1.12*
Rich					1.02	0.97-1.08	1.05	1.01-1.09*	1.09	1.05-1.14*

## **Discussion and conclusion**

This study employed the Cox proportion Hazard Model to examine the effects of women's age, education, place of residence, region, religion, employment status and wealth index on age at first marriage of women between the ages of 15-49 years in Malawi using Malawi DHS from 1992-2016. Our result shows that age, education, place of residence, region, religion, employment status and wealth index are all significant predictors of age at first marriage. What is striking in this study is the fact that age at first marriage is low and remained stagnant from 1992 to 2016 in Malawi. The empirical revelation from this study is that the median age at first marriage in Malawi (17 years) did not change over a period of 26 years. This means that marrying before reaching adulthood by women is a common practice in Malawi. Thus, the advocacy on reducing child marriage has not been achieved in Malawi.

Our analysis on the association of between age of women and age at first marriage corroborated with previous findings in a Malawi study by Palamuleni (2011) and findings of Adebawale et al. (2012) in a study in Nigeria, Garenne (2004) in a study conducted in sub-Saharan Africa and Kumchulesi et al. (2011) in Burkina-Faso which suggested that women between the ages of 15-19 years marry much earlier compared to their older counterparts. This could be that young girls are being married off by their parents or families on or before the onset of puberty for the sake of underprivileged socioeconomic status, cultural practice and religious norms.

It is demonstrated in our study that early marriage is more common among women with no formal education compared to women that are educated. This finding provides empirical evidence that education is an important determinant of age at first marriage among women and also serves as a protective factor of marrying early (Jisun, 2016). Furthermore, education attainment reduces the risk of early marriage and as such, the higher the level of education the lower the risk of early marriage. The significant association that women with primary, secondary and higher education have lower risk of early marriage is consistent with the findings of previous studies from Malawi, Uganda, and Bangladesh by Palamuleni (2011), Agaba et al (2010), and Jisun (2016) respectively. The effect of education on age at first marriage may be due to the waiting time for schooling and gaining employment after school.



The results of analysis where place of residence, region and religion affiliation is statistically significant to age at first marriage is in line with the study of Amoo (2017), Haloi & Limbu (2013), and Adebawale et al. (2012). A possible explanation for this is that marriage, culture and religion in most sub-Saharan African settings are interwoven and higher price are placed on such bride price for procuring good honour to the family (Adebawale et al., 2012; ). Furthermore, the cultural practice in some regions and the religion orientations may compel women to marry earlier before she's exposed to pre-marital sexual activities.

The effect of employment status and wealth index on age at first marriage is negative in our study. The finding that women who are working and belongs to middle and rich wealth index have higher risk of early marriage contradict findings from previous studies by Haloi & Limbu (2013), Jisun, (2016), and Nur & Mberia (2016) that suggest that increase in wealth and being employed reduce the tendencies of marrying early.

### **Conclusion and recommendation**

All in all, this study established that socio-demographic factors such as age, education, place of residence, region, religion, and employment status and wealth index were all significant predictors of age at first marriage in Malawi. We uncovered that women between the ages of 15-19 years, have primary education, having Muslim religion affiliation, residing in central region, and living in rural areas were increase the risk of early marriage. While this study also found that women that gainfully employed, belonging to middle and rich wealth index are associated with early onset of marriage.

Awareness on the reduction of teenage sexual activities could reduce the risk of early marriage. Young women, particularly those without or with education should be sensitized on sexual reproductive health.

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