

Determinants of Early Marriage among Young Women in Democratic Republic of Congo

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ABSTRACT Early marriage denies children childhood experience, endangers their health, and terminates their expectations. In Democratic Republic of Congo, though the 2006 sexual violence law criminalizes child marriages in the country, but the practice of early marriage persists. DRC has one of the uppermost child marriage incidence rates in the world, where nearly seventy-four percent of girls and women between 15 and 19 years of age are married. This paper examined the socio-economic and demographic determinants of early marriage among young women in the DRC. Descriptive and multivariate analyses performed show that young women who faced first sexual intercourse before 16 are 73.5 times more at risk of early marriage more than those who initiated it at the age 18-24. Also, those with no education have a higher risk of early union than their higher educated counterparts. The paper recommends the adoption of a formal sex education framework before first sexual intercourse.

INTRODUCTION

Marriage, which evidences the transition to adulthood (Ikamari 2005; Palamuleni 2011), remains a crucial and exceptional event in an individual's life-cycle, as well as the basis of the family in societies where matrimony is the only legal bond for the procreation of offspring (Behera 2006; Mibang and Behera 2006; Kamal et al. 2014). Mibang and Behera (2006) defined marriage as a union of man and woman, which establishes the basic unit in a society. Procreation of children for the continuation of society is the basic reason for marriage which also fulfills biological needs and develops social ties among members of society (Mibang and Behera 2006). As such, marriage outlines the onset of the socially acceptable time for sexual activity and childbearing. Consequently, age at first marriage (union) remains the most important factor related to fertility and fertility control. There is no doubt that adolescence has been agreed by many authors as a critical age for girls throughout the world. This is because this period shapes future life circumstances (Mensch et al. 2014).

Indeed, early marriage is an old and a world-wide phenomenon. UNDP (2011) reported that state or customary laws allow girls younger than 18 to marry with the consent of parents or other authorities in about 146 countries. Furthermore, the report indicates girls under age 15 can marry with parental consent in 52 of these countries. Previous studies have shown that for many girls in the developing world, the commencement of puberty marks a time of increased vulnerability to early marriage (Loaiza and Wong 2012).

Projections from UNFPA indicate that 142 million girl marriages will take place between 2011–2020, means 39000 girl marriages daily, and 151 million in 2021–2030 (UNFPA 2012). However, sub-Saharan African countries are most affected in terms of prevalence. Statistics indicate that nine of ten countries with the highest rates of child marriage in the world are in sub-Sahara African. In the light of this, Niger has the highest child marriage prevalence rate in the world (75%) followed by Chad (72%) and the Central African Republic (68%) (UNFPA 2012).

However, early marriage, known also as child marriage, defined as marriage under age 18 (UNICEF 2001), is a practice that robs children of their childhood, imperils their health, and destroys their hopes (Brown 2012). Marriage at early age immediately imposes adult roles and responsibilities and ends a girl's childhood and

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adolescence. This early closure happens before she is emotionally, physically and psychologically ready for adulthood (Karei and Erulker 2010). In addition, this scenario also forecloses schooling opportunities for the young women because they are dedicated to their domestic, marital and maternal duties. Research has shown that marriage at an early age is associated to early child-bearing, a repeat childbirth in less than 24 months, multiple unwanted pregnancies, a higher risk of induced abortion and higher fertility, a lack of contraceptive use (Raj et al. 2009; ICRW 2012) and female sterilization (Raj et al. 2009). There is a high risk tendency of domestic violence and sexually transmitted diseases, for girls who marry early. This is so, especially since sex is likely to be unprotected within marriage (UNICEF 2009; Raj et al. 2010). In contrast, young girls who marry later and delay pregnancy beyond their adolescence have a better chance of staying healthier, bettering their education and building a better life for themselves and their families. In addition, there are taboos about the loss of virginity in many Congolese cultures, child marriage is often seen as a safeguard against 'immoral' or 'inappropriate behaviour' such as premarital sex (UNFPA 2012). Consequently, gifts are presented to the parents of a virgin bride, while the virgin is highly valued by her husband and honoured by his family. At the same time, a number of girls and women become the wives of their rapists given the loss of virginity. Research revealed that a man who rapes a virgin is obliged to marry her, and does not always have to pay a dowry to do so (Maila 2009), particularly in cases where she has become pregnant.

Previous research indicates that one of the other factors that propelled teenagers to accept early marriage was a response to their social, emotional, and sexual needs. They view marriage as a way to achieve the independence and social identity as an essential part of their transition to adulthood. They presume that marriage would bring for them more respect, peace, love, and autonomy in decision-making in their future life (Montazeri et al. 2016). Furthermore, available evidence suggests that high rates of unintended pregnancy and maternal mortality most times drive teenage girls to early marriage (Santhya and Jejeebhoy 2015).

In DRC, though the 2006 sexual violence law criminalizes child marriages in the country, the

legal age of marriage is 15 for women and 18 for men (DRC Code de la famille 1987). As a result, the practice of early marriage persists. Available statistics showed that DR Congo has one of the highest child marriage prevalence rates in the world where nearly seventy-four percent of girls and women between 15 and 19 years of age are married (UNICEF 2012). Among women aged 20-24, nine percent are married by age 15 and thirty-nine percent by age 18 (MOP 2011). Indeed, in 2010, 1,189,000 women aged 20-24 were married/in union before age 18. Projection from UNICEF (2012) highlighted that if present trends continue, over 2,000,000 of the young girls born between 2005 and 2010 will be married/in union before age 18 by 2030, which represents an increase of seventy-one percent from the 2010 estimates. Therefore, understanding the dynamics that affect marriage at the early age contributes in taking urgent action to scale down and prevent thousands of girls in DR Congo today from being married in the next decade.

DRC has one of the highest adolescent fertility rate in the world with 168 births per 1,000 women (PRB 2013) along with the total fertility rate (TFR) of 6.6 children per woman (DRC-DHS 2013). Moreover, early marriage has been found to be a cause of numerous adverse reproductive health outcomes (Raj et al. 2009; ICRW 2010; WHO 2011; UNFPA 2012; Godha et al. 2013). Marrying early is categorized as a key driver of teenage pregnancies in South Asia and sub-Saharan Africa (WHO 2011; UNFPA 2012). Girls who tie the knot early habitually have their pregnancy and experience of childbirth at a young age due to their higher frequency of sexual activity (UNFPA 2012).

Early marriage is also associated with a lack of contraceptive. Findings from Sub-Saharan Africa showed that contraceptive use is low overall among adolescents who are married or in a union (UNFPA 2012; Godha et al. 2013). According to UNICEF, immediately the girls in DRC are married, very few of them (14.5%) use contraceptives in spite of their needs to space their child-bearing time. In the same vein, PRB (2013) indicated that only four percent of adolescents aged 15-19 and five percent of youths aged 20-24 used contraceptive modern method during the period 2005-2011. Marrying at an early age leads to a low use of maternal healthcare services. Nonetheless, it is argued that an acceptable level of prenatal care can reduce the risk of child-

birth complications. Unfortunately, due to lack of freedom and information, these young girls who marry at an early age have no access to health services, which incidentally increases the risks of maternal complications and mortality (UNFPA-IPPF 2006).

The understanding of the factors influencing woman's early age at first marriage has always been of particular interest since early marriage is associated with a range of poor social, physical and health outcomes for adolescent women and their descendants (Nour 2006; Khan and Mishra 2008; Raj et al. 2009; ICRW 2012; UNFPA 2012; Godha et al. 2013). Across Africa, numerous social, cultural, religious and traditional beliefs and norms are recognized to fuel the perpetuation of early marriage (Romaniuk 2011; UNFPA 2012; Ayiga and Rampagane 2013). Ethnicity through norms, ideas and daily practices has an influence on variables such as education, media exposure, etc., which in turn influence the age of entry into sexual activity and attitudes towards sex. Ayiga and Rampagane (2013) found that ethnicity may influence age at marriage. The economic dimension as well is a driving force of the practice. Previous studies indicate that poverty plays a fundamental role in maintaining child marriage (UNICEF 2001; UNFPA 2012; Kamal et al. 2015). In reality, the traditional practice of early marriage is most prevalent in poor rural communities, and it often perpetuates the cycle of poverty. Further, a survey conducted by MICS4 (MOP 2010) in DRC found that early marriage occurs more frequently among girls who are the least educated, poorest, from Katanga and Orientale provinces and living in rural areas (MOP 2010).

In the context of DRC, socio-economic and behavioural factors that affect early marriage have not been exhaustively investigated. Qualitative studies show that early marriage is generally driven by poverty, conflict and humanitarian situation, gender and age discrimination, rape and tradition (Maila 2009; UNFPA 2012; FTS 2013). Consequently, this paper examined the socio-economic and demographic determinants of young women's age at first marriage.

METHODOLOGY

Descriptive and multivariate analyses were used. Chi-square was used to test for association between independents and outcome vari-

able. Binary logistic regression further established the determinants of age at first marriage. The Statistical Package for Social Sciences (SPSS) version 23.0 software was used for estimations. The study used secondary data obtained from the DRC DHS 2014. A sub-sample of 3,663 young women aged 15-24; currently married, living with a partner, divorced, separated or widowed was used.

Young women's age at first marriage was selected as the dependent variable of the study. Age at first marriage expresses the age at which the first marriage or union with partner occurred. The value of 0 was assessed for age at first marriage being 18 years and above, and the value of 1 for age being less than 18 years, and 18 years is considered as the legal age for marriage for females. Thirteen independent variables categorized into socio-economic and cultural, demographic and behavioural characteristics were used in the analyses namely, education, employment status, wealth index, exposure to media, religion; ethnicity, current age, marital status, number of unions, number of other wives, province; type of residence and age at first sexual intercourse.

Table 1 depicts the distribution of the current age and age at first marriage. It emerges that the majority (72.1%) of young women in the study were young adults (aged 20-24) while 27.9 percent were adolescents (aged 15-19). Moreover, the majority (64.3%) of respondents entered into marriage by 18, 35.7 percent got married in their emerging adulthood while 17.7 percent were married in their early adolescence by 15. In all, the average age of respondents was 20.7 and the average age at first marriage was

Table 1: Distribution of current age group and age at first marriage

<i>Individual characteristics</i>	<i>Number (%)</i>	<i>Mean (SD)</i>
<i>Age Group</i>		
15-19	971 (27.9)	17.9 (1.1)
20-24	2511 (72.1)	21.8 (1.4)
Total	3482 (100)	20.7 (2.2)
<i>Age at First Marriage</i>		
<15	617 (17.7)	13.1 (1.0)
15-17	1621 (46.6)	16.1 (0.8)
18-24	1243 (35.7)	19.3 (1.4)
Total	3481 (100)	16.7 (2.4)

Source: Computed by authors from DRC-DHS-2013-2014

16.7 years. This was computed by authors from DRC-DHS-2013-2014.

RESULTS

Results from Table 2 indicate that 65.9 percent of employed women experienced first union by 18 years, which decreased among unemployed women (61.2%). Also, the researchers' results indicate that women in the poorest wealth quintile were more likely to enter into marriage at an early age (16.3 years) when compared to women in other wealth quintiles such as richest (17.1 years). It appears that women's age at first marriage increased with the living standard in the household. Table 2 indicates the percentage of young people who experienced early marriage being bigger in the poorest quintile (70.3%), which decreased in other wealth quintiles for instance, richest (59.6%).

The researchers' findings indicate that 65.8 percent of women not exposed to media have experienced their first marriage by 18 years versus 59.7 percent among those exposed to media. Besides, young women in Cuvette central ethnic group were more likely to marry at an early age (16.3) compared to women in other ethnic groups for instance, Bakongo (17.3). Understandably, the proportion of women who faced early union was higher in Cuvette central group (71.1%), which decreased in other ethnic groups such as, Bakongo, Nord and Sud (54.7%). Considering province, young women from Maniema scored highest in respondents who faced early marriage (75.3%) compared to those from Bas Congo who scored lowest (48.2%). Table 2 highlights that the age at first marriage significantly varied either women were living in rural or urban area. On average, young women who resided in rural area were more likely to marry early (16.6 years) than those who resided in urban area (16.9 years). Similarly, the higher proportion of women who underwent early union (65.2%) were found in rural area compared to urban area (62%).

The results from Table 3 indicate that on average, adolescents aged 15-19 were more likely to start a marriage at the early age (15.6) than young adults (17.2). Reasonably, 88.5 percent of adolescents have undergone early union against 54.9 percent of young adults. Regarding marital status, it appears that on average widowed, divorced or separated women experienced first marriage earlier (16.4) than married and living

with partner women (16.6 and 17 respectively). Furthermore, widowed, divorced or separated women scored higher (67.9%) in young women who have faced early marriage, whereas married and living with partner women scored lower (65.9% and 60% respectively). Findings show that eighty-three percent of respondents who have experienced more than one union entered into conjugal union before reaching the age of 18 which decreased to sixty-three percent among those who faced once union. With regard to the number of others wives which express the type of union (monogamous or polygamous), the proportion of women who faced early union slightly decreased from women in a monogamous union (64.3%) to those in polygamous union (61.9%). The age at first sexual intercourse was found to be strongly associated with the age at first cohabitation, indicating that the age of entry into union largely changed with sexual activity initiation. On average, women who started sexual intercourse by 16 were more likely to face early entry into marriage (15.4 years) than those who initiated it at the age 18-24 (19.1). Moreover, the proportion of respondents who faced early union was larger among women who experienced sexual intercourse by 16 (83.2%), which decreased among those who experienced it at the age 18-24 (6.8%).

Binary logistic regression analysis was performed to determine the risk factors of early marriage. In this model, age at first marriage (union) was used as a dependent variable. Moreover, age at first marriage was dichotomized by assessing the value of 0 for age at first marriage being 18 years and above, and the value of 1 for age being less than 18 years. Table 4 presents the results based on the binary logistic regression analysis for early age at first union. Amongst 12 independent variables used in the model, 10 are significantly predictive of age at first marriage at ninety-five percent namely, age at first sexual activity, education, woman's current age, province, ethnicity, family wealth index, marital and employment status, number of other wives, number of unions. Other variables such as exposure to media and type of place of residence did not show any statistical evidence of significant influence at ninety-five percent.

Age at first intercourse is the strongest positive factor related to the postponement of marriage. Findings show that age at first sexual intercourse strongly influences age at first mar-

Table 2: Distribution of age at first marriage by socio-economic and cultural characteristics

<i>Socio-economic and cultural characteristics</i>	<i><15 N (%)</i>	<i>15-17 N (%)</i>	<i>18-24 N (%)</i>	<i>Total N (%)</i>	<i>Mean(SD)</i>
<i>Socio-economic</i>					
<i>Educational Level</i>					
No Education	109 (22.0)	242 (48.9)	144 (29.1)	495 (100)	16.2 (2.4)
Primary	314 (22.2)	648 (45.8)	454 (32.0)	1416 (100)	16.4 (2.4)
Secondary	192 (12.4)	727 (47.0)	629 (40.6)	1548 (100)	17.1 (2.4)
Higher	2 (9.1)	4 (18.2)	16 (72.7)	22 (100)	19.5 (3.1)
Total	617 (17.7)	1621 (46.6)	1243 (35.7)	3481 (100)	
$\chi^2(0.95)=136.1, p=.000$					
<i>Employment Status</i>					
No	171 (15.3)	515 (45.9)	435 (38.8)	1121 (100)	16.9 (2.4)
Yes	444 (18.9)	1106 (47.0)	803 (34.1)	2353 (100)	16.6 (2.4)
Total	615 (17.7)	1621 (46.7)	1238 (35.6)	3474 (100)	
$\chi^2(0.95)=10.5, p=.015$					
<i>Exposure to Medias</i>					
No	481 (18.5)	1226 (47.3)	887 (34.2)	2594 (100)	16.6 (2.4)
Yes	128 (14.8)	388 (44.9)	348 (40.3)	864 (100)	17 (2.5)
Total	609 (17.6)	1614 (46.7)	1235 (35.7)	3458 (100)	
$\chi^2(0.95)=17.3, p=.001$					
<i>Family Wealth Index</i>					
Poorest	162 (19.9)	411 (50.4)	243 (29.7)	816 (100)	16.3 (2.4)
Poorer	123 (15.7)	343 (43.9)	316 (40.4)	782 (100)	16.9 (2.4)
Middle	152 (20.9)	343 (47.1)	233 (32)	728 (100)	16.5 (2.30)
Richer	117 (17.3)	298 (44.0)	262 (38.7)	677 (100)	16.9 (2.5)
Richest	63 (13.2)	225 (47.1)	190 (39.8)	478 (100)	17.1 (2.5)
Total	617 (17.7)	1620 (46.5)	1244 (35.7)	3481 (100)	
$\chi^2(0.95) = 56.8, p=.000$					
<i>Socio-cultural Religion</i>					
Catholic	189 (19.6)	424 (43.9)	353 (36.5)	966 (100)	16.7 (2.5)
Protestant	172 (16.7)	500 (48.7)	355 (34.6)	1027 (100)	16.6 (2.4)
Kimbanguiste	15 (16.7)	35 (38.9)	40 (44.4)	90 (100)	17.2 (2.6)
Other Christians	215(16.8)	605 (47.3)	459 (35.9)	1279 (100)	16.8 (2.4)
Muslim	11 (24.4)	23 (51.1)	11 (24.4)	45 (100)	16.1 (2.3)
Animist/other and No Religion	13 (21.7)	28 (46.7)	19 (31.7)	60 (100)	16.3 (2.3)
Total	615 (17.7)	1615 (46.6)	1237 (35.7)	3467 (100)	
$\chi^2(0.95) =18.3 p=.249$					
<i>Ethnicity</i>					
Bakongo, Nord and Sud	21(11.7)	77(43.0)	81(45.2)	179(100)	17.3(2.4)
Bas-Kasai and Kwilu-Kwango	89(15.6)	228(40.1)	252(44.3)	569(100)	17.1(2.7)
Cuvette central	60(19.9)	154(51.2)	87(28.9)	301(100)	16.3(2.4)
Ubangi - Itimbiri and Pymgy	94(20.8)	226(50.1)	131(29.1)	451(100)	16.4(2.3)
Uele Lac Albert	59(20.5)	131(45.5)	98(34.1)	288(100)	16.6(2.5)
Basele-K , Man and Kivu	131(18.8)	306(44.0)	259(37.2)	696(100)	16.7(2.5)
Kasai, Katanga, Tanganika and Lunda	153(16.3)	490(50.2)	317(33.6)	976(100)	16.6(2.3)
Foreign/Non-Congolese	4(23.5)	5(29.4)	8(47.1)	17(100)	17.3(2.9)
Total	617(17.7)	1617(46.5)	1243(35.8)	3477(100)	
$\chi^2=76.2, p=.000$					

Source: Computed by authors from DRC-DHS-2013-2014

Table 3: Distribution of age at first marriage by demographic, enabling and behavioral characteristics

<i>Demographic, enabling and behavioural characteristics</i>	<i><15 N (%)</i>	<i>15-17 N (%)</i>	<i>18-24 N (%)</i>	<i>Total N (%)</i>	<i>Mean(SD)</i>
<i>Demographics</i>					
<i>Current Age Group</i>					
15-19	247 (25.4)	613 (63.1)	111 (11.4)	971 (100)	15.6 (1.7)
20 -24	370 (14.7)	1008 (40.2)	1132 (45.1)	2510 (100)	17.2 (2.5)
Total	617 (17.7)	1620 (46.5)	1244 (35.7)	3481 (100)	
$\chi^2(0.95) = 372, p=.000$					
<i>Marital Status</i>					
Married	357 (17.8)	963 (48.1)	683 (34.1)	2003 (100)	16.6 (2.4)
Living with partner	173 (15.8)	483 (44.2)	436 (39.9)	1092 (100)	17.0 (2.6)
Widowed/Divorced/Separated	88 (22.7)	175 (45.2)	124 (32)	387 (100)	16.4 (2.4)
Total	618 (17.7)	1621 (46.6)	1243 (35.7)	3482 (100)	
$\chi^2(0.95) = 34.4, p=.000$					
<i>Number of Unions</i>					
Once	547 (16.7)	1516 (46.3)	1208 (37.0)	3271 (100)	16.8 (2.4)
More than once	67 (32.5)	104 (50.5)	35 (17.0)	206 (100)	15.5 (2.4)
Total	614 (17.6)	1620 (46.6)	1243 (35.8)	3477 (100)	
$\chi^2(0.95) = 50.2, p=.000$					
<i>Number of Other Wives</i>					
No. of other wives	422 (16.3)	1244 (48.0)	928 (35.7)	2594 (100)	16.7 (2.4)
1 and plus	94 (21.4)	178 (40.5)	167 (38.0)	439 (100.0)	16.7 (2.8)
Don't know	14 (23.3)	23 (38.3)	23 (38.4)	60 (100)	16.7 (2.5)
Total	530 (17.1)	1445 (46.7)	1118 (36.1)	3093 (100)	
$\chi^2(0.95) = 16.2, p=.013$					
<i>Enabling Provinces</i>					
Kinshasa	31 (17.7)	69 (39.4)	75 (42.9)	175 (100)	17.1 (2.9)
Bandundu	83 (15.4)	227 (42.3)	227 (42.3)	537 (100)	17 (2.6)
Bas-Congo	16 (14.3)	38 (33.9)	48 (51.8)	112 (100)	17.5 (2.3)
Equateur	106 (20.0)	269 (50.9)	154 (29.1)	529 (100)	16.4 (2.4)
Kasai-Occidental	45 (17.0)	138 (52.1)	82 (30.9)	265 (100)	16.4 (2.1)
Kasai-Oriental	70 (15.7)	219 (49.2)	156 (35.1)	445 (100)	16.6 (2.2)
Katanga	55 (15.9)	185 (53.3)	107 (30.9)	347 (100)	16.6 (2.4)
Maniema	39 (22.9)	89 (52.4)	42 (24.7)	170 (100)	16.1 (2.4)
Nord Kivu	35 (14.4)	99 (40.7)	109 (44.8)	243 (100)	17.2 (2.3)
Orientale	81 (20.9)	176 (45.5)	130 (33.6)	387 (100)	16.5 (2.5)
Sud Kivu	56 (20.6)	113 (41.5)	103 (37.8)	272 (100)	16.8 (2.4)
Total	617 (17.7)	1622 (46.6)	1243 (35.7)	3482 (100)	
$\chi^2(0.95) = 103.6, p=.000$					
<i>Place of Residence</i>					
Urban	151 (14.8)	482 (47.)	288 (38.)	1021 (10)	16.9 (2.5)
Total	617 (17.7)	1620 (46.5)	1244 (35.7)	3481 (100)	
$\chi^2(0.95) = 12.5, p=.000$					
<i>Behavioural Age at First Sex</i>					
<16	597 (35.3)	810 (47.9)	284 (16.8)	1691 (100)	15.4 (2.31)
16 to 17	18 (1.7)	764 (70.8)	297 (27.4)	1079 (100)	17.2 (1.65)
18 to 24	2 (0.3)	46 (6.5)	661 (93.2)	709 (100)	19.1 (1.53)
Total	617 (17.7)	1620 (46.6)	1242 (35.7)	3479 (100)	
$\chi^2(0.95) = 1803.8, p=.000$					

Source: Computed by authors from DRC-DHS-2013-2014

riage. Respondents who initiated sexual activity before reaching the age of 16 are 73.5 times ($p < 0.001$) more likely to experience early marriage than those who initiated it between the ages of 18 and 24. Moreover, respondents who had experienced first sexual intercourse at the age 16-17 are 42.3 times ($p < 0.001$) more likely to get married before reaching the age of 18 compared to those who had initiated first sexual activity between the ages 18 and 24. The results highlight that adolescent women (aged 15-19) are 5 times ($p < 0.001$) more likely to commence conjugal union before the age of 18 than their young adult women (aged 20-24) counterparts. In addition, Tables 2 and 3 shows the distribution of age at first marriage by socio-economic, cultural demographic characteristics, while Table 4 shows the computed binary logistics analysis computed by the authors.

DISCUSSION

Early marriage is also very much affected by the Family's Wealth Index with regard to well-being. Participants registered in the poorer wealth quintile at the time of the survey are 0.5 times ($p < 0.05$) less likely to face early marriage than those recorded in the richest wealth quintile. Similarly, participants registered in richer and poorest quintiles are 0.5 and 0.6 times ($p < 0.01$ and $p < 0.05$ respectively) less likely to enter into the union of matrimony before the age of 18 than those registered in the richest quintile. Furthermore, the variable (number of unions) is a negative predictor of early first union. Respondents who experienced more than one union are 3.2 times ($p < 0.001$) more likely to marry before the age of 18 compared to those who had experienced one union. Ethnicity influences the frequency of early marriage and is quite acceptable in Congolese society ($X^2 = 18.18$, $df = 6$, $p < 0.01$). Nevertheless, no significant variations were observed amongst different ethnic groups concerning the early age at first conjugal relationship when compared to the respondents from the Bakongo, Nord and Sud group.

Marital and employment status were found to be predictors of early first marriage. Respondents registered as married at the time of the survey are 1.5 times ($p < 0.001$) more likely to challenge early marriage than those registered as living with a partner; on the other hand, respondents who were not employed are 0.75 times

($p < 0.05$) less likely to confront early union than their employed counterparts. The variable (Number of other wives) shows a significant relationship with early age at first marriage. Women who are living in a monogamous union are 1.5 times ($p < 0.05$) more likely to wed by 18 years than those who are living in a polygamous system.

Evidence from Table 4 show that education is a strong and positive significant predictor for the change in the age at first union. Respondents with no education are 14.1 times ($p < 0.005$) more likely to get married before reaching the age of age 18 than those with higher education. In turn, respondents with primary and secondary education are 10.7 and 8.6 times ($p < 0.05$) more likely to undergo earlier marriage than their higher educated counterparts. Similarly, women's current age also is a positive predictor of age at first marriage. The educational level of the woman also influences the age of first marriage. Findings from Malawi, South Africa and Uganda pointed out that education is a most determinant of age at first marriage (Ayiga and Rampagane 2013; Palamuleni 2011), adolescents who are in school are less likely to marry early (Kamal et al. 2015; Kara and Maharaj 2015).

With regard to the provinces, Table 4 shows a positive relationship between age at first union and respondent's province when compared to the respondents from Kinshasa. Respondents from Sud Kivu province are 2.7 times ($p < 0.05$) more likely to tie the knot before the age of 18 compared to those from Kinshasa. Others studies have demonstrated that province and place of residence are factors that significantly affect the timing of marriage (Ayiga and Rampagane 2013; Palamuleni 2011; MOP 2011; Kara and Maharaj 2015). Furthermore, findings from sub-Saharan Africa underlined that a rural environment is favourable for early sexual debut and early marriage (Akoto et al. 2005; Kara and Maharaj 2015). Thus, the differences between urban and rural areas, impact girls and young women's status, their economic socialisation and entering sexual and maternal life.

In the present study, the average age at first sexual intercourse is 15.7. About half of respondents reported early sexual intercourse, the greater part of respondents who initiated early sexual activity faced early marriage compared to very few of those who initiated sex at the age 18-24; indicating that early sexual activity possibly leads to early marriage. The multivariate analysis found

Table 4: Binary logistics analysis results of age at first marriage in DRC 1013-14

Independent variables	Odds ratios (OR)	95% C.I. for OR	
		Lower	Upper
<i>Demographic</i>			
<i>Age Groups</i>			
15-19	4.990	3.78	6.555
20-24	RC		
<i>Marital Satus</i>			
Married	1.53**	1.208	1.937
Living with partner	RC		
Widowed/Divorced/Separated			
<i>Number of Unions</i>			
Once	RC		
More than once	3.162***	1.933	5.172
<i>Number of Other Wives</i>			
One and plus	RC		
No other wives	1.445*	.05	1.924
<i>Socio-cultural</i>			
<i>Ethnicity</i>			
-			
Bakongo, Nord and Sud	RC		
Bas-Kassi et KwluKwango	0.343	0.243	1.213
Cuvette central and Foreigners	1.103	0.467	2.605
Ubangi et Itimbiri and Pygmy/Other	1.843	0.749	4.533
Uele Lac Albert	0.781	0.288	2.122
Basele-K, Man et Kiva	0.560	0.208	1.505
Kasai, Katanga, Tanganika and Lunda	0.870	0.354	2.140
<i>Socio-economic</i>			
<i>Highest Educational Level</i>			
No education RC	1.082**	3.135	63.248
Primary	10.657**	2.429	46.757
Secondary	8.635**	1.997	37.335
Higher	RC		
<i>Employment Status</i>			
Yes RC	RC		
Yes	0.752*	0.601	0.942
<i>Exposure to Medias</i>			
Yes RC	RC		
Yes	0.81	0.63	1.06
<i>Wealth Index</i>			
-			
Richest	RC		
Poorest	0.584*	0.343	0.994
Poorer	0.511**	0.305	0.855
Middle	0.745	0.454	1.224
Richer	0.543**	0.353	0.836
<i>Enabling</i>			
<i>Old province</i>			
Kinshasa	RC		
Bandundu	1.084	0.567	2.075
Bas-Congo	0.448	0.174	1.151
Equateur	0.599	0.291	1.233
Kasai-Oriental	2.041	0.970	4.295
Katanga	1.416	0.654	3.066

Table 4: Contd...

Independent variables	Odds ratios (OR)	95% C.I. for OR	
		Lower	Upper
Maniema	2.696	0.975	7.452
Nord-Kivu	1.134	0.463	2.777
Orientale	0.812	0.362	1.822
Sud-Kivu	2.651*	1.075	6.538
<i>Type of Place of Residence</i>			
Rural			
Urban	0.832	0.602	1.151
<i>Behavioural</i>			
<i>Age of First Sex</i>			
<16	73.498***	51.047	105.823
16-17	42.287***	29.429	60.795
18-24	RC		

Source: Computed by authors from DRC-DHS-2014-2014
 =p<0.001, **=p<0.01, *=p<0.05 (, ** and * indicated the level of significance at specific level) RC= reference category

that respondents who faced early sexual activity (OR=73.5) and those who experienced it at 16-17 (OR= 42.3) are more at risk of early marriage than those who initiated at the age 18-24. This finding supports Ayiga and Rampagane's (2013) result that age at first sexual activity is a determinant of age at first marriage. In fact, the respondents' average age at sexual initiation is lower than what was reported by DRC-DHS (2014) at the national level (16.8). One possible explanation might be the young age of the respondents, given that there is an increased sexuality among youths the world over (Boonstra 2011). Also, the insupportable huge number of rapes after two decades of armed conflict in DRC has increased the vulnerability of girls to early and forced marriage as noted (FTS 2013).

Evaluation of the women's education, suggest that the majority of women with no education and few of those with tertiary education engaged in early union. Multivariate analysis indicates that women with no education (OR=14.1) and primary education (OR=10.7) have a higher risk of early union than their higher educated counterparts. The findings indicate that the lower the education level, the higher the risk of early marriage. This confirms earlier research which showed a strong association between women's education and age at first marriage (Grant and Hallman 2008; Romaniuk 2011; Nasrin and Rahman 2012; Ayiga and Rampagane 2013). This could be explained by the past two decades of rebellions and armed conflicts. In-

deed, in an after conflict country such as DRC, households ironically fund approximately eighty to ninety percent of educational spending (UN-HCR 2012), regardless of generalized unemployment and pauperization. Given that education lets girls imagine and plan their own futures as noted by Martin (1995).

At the bivariate level of analysis, it appears that a greater number of adolescents have experienced early marriage compared to more than half of young adults. Multivariate analysis shows adolescent women are 5 times more likely to experience early marriage than their young adult women counterparts. In the vein of Palamuleni (2011), this study found women's current age as a risk predictor of early marriage. A possible explanation could be the observance of the "code de la famille" which maintains that the legal age of marriage is 15 for women and 18 for men (DRC Code de la famille 1987). The DRC Government has refreshed its execution of the 2006 sexual violence law that criminalises child marriages in the country and considers 18 as the legal age of marriage for women (DRC 2006).

CONCLUSION

This paper aimed to ascertain information on youth age at first marriage, thereby improving the state of knowledge of the factors explaining youth early marriage in DRC. The relationships between age at first marriage and the various variables of researches are examined. Tables 2 and 3 indicate amongst 13 independent variables selected for the study, 12 were found to be significantly related to the age at first marriage namely, education, employment status, wealth index, exposure to media, ethnicity, current age, marital status, number of unions, number of other wives, province; type of residence and age at first sexual intercourse. No significant association was found between religion and the age at first marriage. Findings also show that the average age at first union increased from young women with no education (16.2) to those with higher education (19.5). It emerges that age at first marriage increased with educational level and the highest proportion of participants who experienced early marriage amongst young women with no education and the lowest among women with higher education are 70.9 percent and 27.3 percent respectively.

The multivariate analyses have suggested predictors of early marriage among DR Congolese young women. It emerged that early entry

into marriage is significantly determined by age at first sexual intercourse, education, woman's current age, province, ethnicity, family wealth index, marital status, employment status, number of other wives and number of unions. Worldwide, adolescents challenge increased sexual activity. On the other hand, primary education is not free in DRC and the "code la famille" maintains the legal age for marriage at 15 for women.

RECOMMENDATIONS

Deductions from the researchers' analysis suggest that poor reproductive health outcomes are likely to be on the increase for these young women in Congo. Policy framework stemming this tide is imperative. Further, there is an urgent need for formal sex education before first sexual initiation to give better options than early marriage to adolescent girls. Programme planners are encouraged to set-up a set of interventions and support related to youth sexual activity. This will support positive reproductive outcomes for these young women. The DRC Government (policy makers) are stimulated to implement universal primary education, which should be free and compulsory and extend primary education from six to eight years.

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REFERENCES

- Akoto EM, Amouzou AJ, Djangone R, Kassegne S, Ngondo AP 2005. Sexuality, Fertility, Contraception Among Young People in Côte d'Ivoire, Cameroon, Togo and Burkina Faso, *Communication at the 25th Population Congress*, Tours from 18 to 23 July 2005.
- Ayiga N, Rampagane V 2013. Determinants of age at first marriage in sub-Saharan Africa: A comparative study of Uganda and South Africa. *Journal of Social Development in Africa*, 28(1): 9-36.
- Brown G 2012. *Out of Wedlock into School: Combating Child Marriage through Education*. London: The Office of Gordon and Sarah Brown Limited.
- Boonstra HD 2011. Advancing sexuality education in developing countries: Evidence and implications. *Guttman Policy Review*, 14(3): 17-23.

- Constitution de la République Démocratique du Congo 2006. From <<http://www.presidentrdc.cd/constitution.html>> (Retrieved on 10 February 2015).
- DRC Family Code 1987. Law N° 87.010 OF 1 August 1987 Bearing the Family Code.
- DRC Standard DHS 2014. *Enquête Démographique et de Santé (EDS-RDC)*. Ministère du (2013-2014)
- Free the Slaves (FTS) 2013. Wives in Slavery: Forced Marriage in the Congo. Exposé June 2013. From <<https://www.freetheslaves.net/wp-content/uploads/2015/03/FTS-ForcedMarriage-201306-V1-web.pdf>> (Retrieved on 10 February 2015).
- Grant MJ, Hallman KK 2008. Pregnancy related school dropout and prior school performance in KwaZulu Natal, South Africa. *Studies in Family Planning*, 39(4): 369-382.
- Godha D, Hotchkiss DR, Gage AJ 2013. Association between child marriage and reproductive health outcomes and service utilization: A multi-country study from South Asia. *Journal of Adolescent Health*, 52: 552-558. DOI: 10.1016/j.jadohealth.2013.01.021.
- ICRW 2012. *Child Marriage in Southern Asia: Policy Options for Action*. Washington, DC: ICRW.
- Ikamari LD 2005. The effect of education on the timing of marriage. *Demographics Research*, 12(1): 1-28. DOI: 10.4054/DemRes.
- Kamal SM, Hassan CH, Mahabubul AG, Ying Y 2014. Child marriage in Bangladesh: Trends and determinants. *Journal of Biosocial Science*, 47(1): 1-20. DOI: 10.1017/S0021932013000746.
- Kamal SM, Hassan CH, ALAM G, Ying Y 2015. Child marriage in Bangladesh: Trends and determinants. *Journal of Biosocial Science*, 47(1): 120-139.
- Karei EM, Erulker A 2010. *Building Programs to Address Child Marriage: The Berhane Hewan Experience in Ethiopia*. New York: Population Council.
- Khan S, Mishra V 2008. *Youth Reproductive and Sexual Health, DHS Comparative Reports*. Calverton, MD, USA: Macro International Inc.
- Loaiza Sr, Wong S 2012. Marrying Too Young. End Child Marriage. From <<http://www.unfpa.org/sites/default/files/pub-pdf/MarryingTooYoung.pdf>> (Retrieved on 3 March 2015).
- Martin TS 1995. Women's education and fertility: Results from 26 demographic and health surveys. *Studies in Family Planning*, 36(4): 187-202.
- Maila H 2009. War, Tradition Feeds Sexual Violence Against Women. Institute for War and Peace Reporting. From <iwpr.net/print/report-news/war-tradition-feeds-sexual-violence-against-women> (Retrieved on 5 April 2015).
- Mensch BS, Soler-Hampejsek E, Kelly CA, Hewett PC, Grant MJ 2014. Challenges in measuring the sequencing of life events among adolescents in Malawi: A cautionary note. *Demography*, 51(1): 277-285.
- Ministry of Planning 2011. Multiple Indicators Cluster Survey 4/2010. *Final Report*. Accra, Ghana
- Mibang T, Behera MC 2006. *Marriage and Culture: Reflections from Tribal Societies of Arunachal Pradesh*. Arunachal Pradesh, India: Mittal Publications.
- Nawal M 2006. Health consequences of child marriage in Africa. *Emerging Infectious Diseases*, 12(11): 1644-1649.
- Nasrin SO, Rahman KM 2012. Factors affecting early marriage and early conception of women: A case of slum areas in Rajshahi City, Bangladesh. *International Journal of Sociology and Anthropology*, 4(2): 54-62. DOI: 10.5897/IJSA11.145.
- Palamuleni ME 2011. Socio-economic determinants of age at marriage in Malawi. *International Journal of Sociology and Anthropology*, 3(7): 224-235.
- Population Reference Bureau (PRB) 2013. *The World's Youth 2013 Data Sheet*. Washington, DC, USA: Plan.
- Ministère de la Santé and ORC Macro, Calverton, MD.
- Raj A, Saggurti N, Balaiah D, Silverman JG 2009. Prevalence of child marriage and its effect on fertility and fertility-control outcomes of young women in India: A cross-sectional, observational study. *The Lancet*, 373(9678): 1883-1889. DOI: 10.1016/S0140-6736(09)60246-4.
- Raj A, Saggurti N, Lawrence D, Balaiah D, Silverman JG 2010. Association between adolescent marriage and marital violence among young adult women in India. *International Journal of Gynecology & Obstetrics*, 110(1): 35-39.
- Romaniuk A 2011. Persistence of high fertility in tropical Africa: The case of the Democratic Republic of the Congo. *Population and Development Review*, 37(1): 1-28.
- Santhya KG, Jejeebhoy SJ 2015. Sexual and reproductive health and rights of adolescent girls: Evidence from low and middle-income countries. *Global Public Health*, 10(2): 189-221.
- Simin Montazeri, Maryam Gharacheh, Nooredin Mohammadi, Javad Alaghband Rad, Hassan Eftekhari Ardabili 2016. Determinants of early marriage from married girls' perspectives in Iranian setting: A qualitative study. *Journal of Environmental and Public Health*, Article ID 8615929, 8 pages.
- UNICEF 2001. Early Marriage: Child Spouses, Innocenti Digest, 7 (2001): 2. From <<http://www.unicef-irc.org/publications/pdf/digest7e.pdf>> (Retrieved on 14 February 2013).
- UNICEF 2009. *State of the World's Children: Celebrating 20 Years of the Convention on the Rights of the Child*. New York: UNICEF.
- UNPD-DESA 2011. *Population Facts No.2011/1*. New York: UNPD-DESA.
- UNFPA 2012. *Marrying Too Young: End Child Marriage*. New York: UNFPA.
- UNICEF 2012. Committing to Child Survival, A Promise Renewed. Progress Report. From <http://www.apromiserenewed.org/files/APR_Progress_Report_2012_final_web3.pdf> (Retrieved on 5 January 2014)
- UNHCR 2012. Country Operations Profile - Democratic Republic of the Congo. From <<http://www.unhcr.org/pages/49e45c366.html>> (Retrieved on 12 May 2015).
- UNFPA-IPPF 2006. Ending Child Marriage: A Guide for Global Policy Action. From <<http://www.unfpa.org/webdav/site/global/shared/documents/publications/2006/endchildmarriage.pdf>> (Retrieved on 5 June 2013)
- WHO 2012. Adolescent Pregnancy Fact Sheet. From <<http://www.who.int/mediacentre/fact-sheets/fs364/en/index>> (Retrieved on 13 June 2015).
- WHO 2011. *Executive Board 130th Session Provisional Agenda Item 6.4 EB130/12*. Geneva: WHO