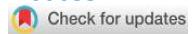


Original Article

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## Determinants and effect of girl child marriage: a cross sectional study of school girls in Plateau State, Nigeria

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### ABSTRACT

**Background:** Child marriage is a major problem contributing to maternal morbidity and mortality in Nigeria. It has effect on both social and health of not only the girl child but the children born to these young mothers. **Aim:** This study aimed at assessing the determinants of early marriage among secondary school girls in Plateau State and its effect especially on their health and education. **Methods:** The study was a cross sectional study of young girls in 21 secondary schools across the three geopolitical zones in Plateau state, selected through a simple random sampling technique after obtaining consent from the JUTH ethical committee and permission from the State ministry of education and the principals of the various schools. **Results:** The study found that while most marriages among girls are forceful marriages, the factors that influenced early marriage was poor educational level of parents, poverty and place of residence. The girls who married among them reported having had some health challenges and educational backwardness as a result of early marriage. **Conclusion:** This study found that poverty and poor education are the underlying cause of child marriage and child marriage is usually against the will of the girls who desire to be educated.

**Key words:** Early marriage, maternal and childhood morbidity and mortality, Child Right Act, girl child education, puberty, teenage pregnancy

### INTRODUCTION

Out of the three key events in most people's lives, birth, marriage and death, only marriage is a matter of choice. Yet many young people especially girls, do not have the opportunity to exercise their right to choose when it involves issues of marriage. The choice is usually made on their behalf and this violates their human rights.<sup>[1]</sup> As defined by the United Nations Children's Fund, UNICEF, early marriage or child marriage is a formal marriage or informal union before the age of 18.<sup>[2]</sup> Therefore, girl child

marriage is marriage of a girl carried out below the age of 18, before she becomes physically, physiologically and psychologically mature to handle the responsibilities of marriage and childbirth.<sup>[3]</sup> This is a practice that is common all over the world and has caused devastating effects on young girls especially in developing countries.

Every year, 10 million girls, that is one girl every three seconds, experiences early marriage worldwide. In developing countries, one in every three girls is married by the age of 18.<sup>[4]</sup> It is

most prevalent in Africa and Asia. It remains between 50% and 60% across Sub-Saharan Africa.<sup>[5]</sup> In Nigeria, the minimum age of marriage is not captured in the constitution, but the Child Rights Act sets this age at 18 years. However, only 23 of the country's 36 states have adopted this act. Hence there are areas within the country in which the minimum age of marriage can be as low as 12 years.<sup>[6]</sup>

This practice of early marriage mainly arises due to poverty, civil strife and low level of development. Some families believe that it limits and discourages promiscuity. It discriminates against the girl child's right, limits her freedom to make decisions, isolates her from her peers, increases her risk of intimate sexual violence and sexually transmitted infections including HIV infection, predisposes her to complications of child birth such as obstructed labour and obstetric fistulae. Maternal mortality in pregnancy is four times higher among girls below the age of 16 years and their new born death rate is 50% higher compared to women who become pregnant after the age of 20 years. Early marriage also causes the girl child to discontinue or interrupt her education. Her children are also less likely to grow up healthy and go to school, thus continuing and worsening the cycle of poverty for generations to come.<sup>[7-9]</sup>

Globally, one of the best means of reducing girl child marriage is girl child education.<sup>[10]</sup> There has been an increase in the attainment of the girl child educational during the last several decades and this has contributed to the relative delay in early marriage of women.<sup>[4]</sup> However the progress observed is still very slow and many girls still enter into marriage too early. This study aims to assess the determinants of early marriage among secondary school girls in Plateau State and its effect especially on their health and education, thus contributing to existing literature on the subject matter.

## METHODOLOGY

A cross sectional study design was used for the study, a minimum sample size of about 380 was calculated using the formula for a cross sectional study. The study population was secondary school girls within the ages of 10-25years across the three senatorial zones in

Plateau State namely; Northern, Central and Southern senatorial zones to ensure the entire state was captured in the study, there are 154 public secondary schools in the Northern zone, 115 in the Central zone and 129 in the Southern zone. The inclusion criteria for the schools were public schools with girls while boys school alone was excluded from the study. From these, 7 schools were selected from each of the senatorial zones across the state through a simple random sampling technique using a table of random numbers to give a total of 21 schools and in each of the schools, a cluster sampling technique was used, where all the females who fulfilled the inclusion criteria and gave their consent were included in the study bringing the total number of participants to 4768.

Permission was obtained from the State Ministry of Education, the zonal education officers and the principals of all the schools taking part in the study. An informed verbal consent was obtained from the female students cutting across all the classes and those who consented were included in the study.

A semi structured self -administered questionnaire, which was pre-tested among secondary school girls in a public school in Jos North LGA, was used to obtain information from the girls over a period of 3 months.

## Statistical analysis

Data cleaning was done and those not properly filled or incomplete questionnaires were not analyzed. The data was entered in excel and exported to SPSS version 20 statistical software for analysis. Chi square test was used to determine significant associations and a *p*-value of less than or equal to 0.05 was considered significant. The results were then presented in tables.

## RESULTS

At the end of the study, 4013 questionnaires that were properly filled were analyzed.

### Socio-demographic characteristics (tables 1 and 2)

A total of 4013 secondary school students participated in the study most of which were in

the central senatorial zone of the State (47.9%). Most of the participants (89.9%) were 18 years of age or below and 74 (1.9%) were married. About 90% of the respondents were Christians and over half of them (54.9%) resided in rural

areas. Most of the fathers and mothers of the respondents had secondary education (53.1% and 30.5% respectively) and their fathers were mostly civil servants and farmers by occupation (49.5% and 29.7 respectively).

Table 1: Socio-demographics of secondary school girls, n=4013

SOCIO-DEMOGRAPHIC FACTORS	FREQUENCY	PERCENTAGE
<b>Senatorial zones</b>		
Northern zone	1116	27.8%
Central zone	1921	47.9%
Southern zone	976	24.3%
<b>Age group</b>		
≤ 18yrs	3574	89.1%
19-25yrs	398	9.9%
> 25	40	1.0%
<b>Marital status</b>		
Married	74	1.8%
Single	3939	98.2%
<b>Residence</b>		
Urban	1809	45.1%
Rural	2203	54.9%
<b>Religion</b>		
Christianity	3610	90%
Islam	403	10%

Table 2: Socio-demographic characteristics of parents

Socio-demographics	Frequency	Percentage
<b>Father's Educational status</b>		
None	423	10.6%
Primary	631	15.7%
Secondary	2127	53.1%
Tertiary	832	20.6%
<b>Father's employment</b>		
Civil servants	1986	49.5%
Farmers	1192	29.7%
Traders/ business	713	17.8%
Doing nothing	122	3.0%
<b>Mother's education</b>		
None	981	24.5%
Primary	1649	41.1%
Secondary	1225	30.5%
Tertiary	158	3.9%

Table 3: Determinants of early marriage among secondary school girls

Determinants	Married	Single	Total	Chi-square	Df	p-value
<b>Religion</b>						
Christianity	58(1.6%)	3552(98.4%)	3610(100%)	11.189	1	0.001
Islam	16(4.0%)	387(96.0%)	403(100%)			
<b>Father's education</b>				11.934	3	0.008
None	14(3.3%)	409(96.7%)	423(100%)			
Primary	18(2.9%)	613(97.1%)	631(100%)			
Secondary	28(1.3%)	2099(98.7%)	2127(100%)			
Tertiary	14(1.7%)	814(98.3%)	828(100%)			
<b>Father's employment</b>				44.540	3	0.000
Civil servants	10(0.5%)	1976(99.5%)	1986(100%)			
Farmers	43(3.6%)	1149(96.4%)	1192(100%)			
Traders	20(2.8%)	693(97.2%)	713(100%)			
Doing nothing	1(0.8%)	121(99.2%)	122(100%)			
<b>Mother's educational</b>				27.458	3	0.000
None	30(3.1%)	951(96.9%)	981(100%)			
Primary	22(1.3%)	1627(98.7%)	1649(100%)			
Secondary	13(1.1%)	1212(98.9%)	1225(100%)			
Tertiary	9(5.7%)	149(94.3%)	158(100%)			
<b>Number of siblings</b>				18.327	2	0.000
≤4	37(1.5%)	2383(98.5%)	2420(100%)			
5-8	23(1.7%)	1302(98.3%)	1325(100%)			
≥9	14(5.2%)	254(94.8%)	268(100%)			
<b>Residence</b>				0.922	1	0.510
Urban	33(1.8%)	1776(98.2%)	1809(100%)			
Rural	41(1.9%)	2162(98.1%)	2203(100%)			
<b>Senatorial zone</b>				27.209	2	0.000
Northern	12(1.1%)	1104(98.9%)	1116(100%)			
Central	25(1.3%)	1896(98.7%)	1921(100%)			
Southern	37(3.8%)	939(96.2%)	976(100%)			

**Determinants of early marriage (table 3)**

Being married amongst secondary school girls was significantly more common among Muslims than Christians and amongst students in the Southern senatorial zones, which is a more rural zone. Father's education and occupation were also significantly associated with being married among the respondents as those whose fathers had lower levels of formal education and those whose fathers were farmers were more likely to be married. Similarly, mothers of respondents

who had no form of formal education were more likely to have been married. Having 9 or more siblings was also significantly associated with being married among the respondents.

**Effect of early marriage on health and education (table 4)**

Most of the married respondents (46%) said they were forced into marriage by their parents, followed by another 20.3 % who got married because they needed money to go to school.

Sixty-eight (91.9%) of the married respondents had been pregnant since marriage and out of them, 37 (54.4%) had experienced a complication during pregnancy or delivery which was mostly excessive bleeding and anaemia

(14% and 13% respectively), followed by obstructed/prolonged labour (10%). Out of the respondents that were married, 68 (82.4%) had to suspend schooling at a point in time in the course of their education.

Table 4: Effect of early marriage on education and health of the school girls

	Frequency	Percentage
<b>Marital status</b>		
Married	74	1.8%
Single	3939	98.2%
Total	4013	100%
<b>Reasons for getting married</b>		
I love the man	12	16.2%
Forced by parents to marry	34	46%
Needed money to go to school	15	20.3%
My mates were married	13	17.5%
Total	74	100%
<b>Ever been pregnant since marriage</b>		
Yes	68	91.9%
No	6	8.1%
Total	74	100%
<b>Any complications during pregnancy and delivery</b>		
Yes	37	54.4%
No	31	45.6%
Total	68	100%
<b>Types of complications</b>		
Prolonged/obstructed labor	10	27%
Excessive bleeding	14	37.9%
Anaemia	13	35.1%
Total	37	100%
<b>Effect on education</b>		
Suspended schooling	61	82.4%
Continued schooling	13	17.6%
Total	74	100%

## DISCUSSION

Out of the 4013 secondary school students that participated in the study, most were 18 years of age or below as shown in table 1. This is not surprising as most secondary school students in the country are less than 18 years. The prevalence of being married among them was found to be 1.9%, which may also be attributed

to the fact that the girl child education may contribute to delay in child marriage.<sup>[4]</sup> It may also be due to the fact that some married girls may have dropped out of school or may not be opportune to even enroll in school at all due factors such as poverty, responsibilities of marriage and childbirth. This is similar to findings from a study conducted in nine African countries where only 6% of married girls aged

14–17 years attended schools compared to 69% of unmarried girls.<sup>[5]</sup> This showed that there were more unmarried than married girls in secondary schools, supporting the findings from Demographic and Health Surveys (DHS) of some African countries which showed that secondary education may be a better protective strategy against early marriage especially among older adolescents than younger adolescents.<sup>[10]</sup>

The study also showed that early marriage was significantly more common among students in the Southern than Northern senatorial zones (table 3). This may be because the Northern zone in which the State Capital Jos, is located, is relatively more urban than the Central and Southern zones. This shows similarity to what was observed in other Sub-Saharan African countries where early marriage was found to be commoner among rural (12%) than urban (16%) dwellers.<sup>[5]</sup>

Lack of education among parents and poverty can also contribute to early marriage among girls. In this study, early marriage was found to be more common among girls whose fathers and mothers had lower level of formal education or none at all. This shows that educated parents are more likely to delay marriage among their young children than the non educated ones. Farming, especially subsistent farming, is practiced mainly by those whose level of education is low and among those in the low socio-economic class. This study showed that girls whose fathers are farmers were more likely to be married. Similarly, in other African countries, it was found that early marriage was highest among the poorest quintile and lowest in the richest quintile.<sup>5</sup> However, in Ethiopia, it was found that the odds of teenage pregnancy increased among young girls in both the poor and rich between 2000 and 2005.<sup>[11]</sup>

Table 4 showed that most of the married respondents were forced into marriage by their parents and others got married because they needed money to go to school. This supports the findings of a Nigerian study where family pressure and poverty were key reasons for early marriage stated by parents of secondary school students in Anambra State.<sup>[12]</sup>

Over half (54.4%) of the married respondents who had ever been pregnant had experienced a complication during pregnancy or delivery which was mostly excessive bleeding and anaemia followed by obstructed/prolonged labour, anaemia has been associated with teenage pregnancy evidence from studies in Nigeria.<sup>[13,14,15]</sup> These findings show that the respondents faced a high risk of pregnancy-related deaths which are the leading causes of mortality for girls aged between 15-19 years (married and unmarried) worldwide. From a study conducted in Zaria, Nigeria, the maternal mortality among women aged less than 16 years was found to be six times higher than for women aged 20-24 years, and this was similar to what was observed in Cameroon and Ethiopia. Most of these deaths were attributable to excessive bleeding and obstructed labour.<sup>[1,16]</sup>

Findings from this study revealed that 82.4% of the married girls had to suspend school during the course of their education. Since it was a school-based study, it did not include those who could have abandoned their education entirely. It was also pointed out in a study conducted in Zaria, Nigeria that there is significant relationship between early marriage and girl-child education, implying that if a girl is married at an early age, it will certainly affect her level of education. She may end up facing the consequences of school drop-out and poverty.<sup>[17,18,19]</sup> This shows that early marriage has a negative impact on a girl's education, either cutting short her education by making her to drop out of school or interrupting the course of her education due to responsibilities like child birth and child rearing. It burdens them with so many responsibilities even in their early age. For those who temporarily suspend schooling, it slows down their education and makes them lag behind their peers which could also affect them psychologically and emotionally.

## CONCLUSION

This study showed that child marriage is a problem for young girls and the outcome devastating both medically and socially. Those who were married and more than half of those ever pregnant experienced a complication of pregnancy or child birth and 82.4% had been made to

suspend their education temporarily. Parents' low level of education, poverty, religion and place of residence were significant determining factors of early marriage in Plateau State. Family pressure and lack of finance for education were also key reasons for engaging in early marriage among the girls. The study concluded that early marriage among young girls have a negative impact on their health and education. Parents need to be counseled more on these detrimental effects on their female children, more efforts should be made in enforcing the rights of the girl child and in improving the girl child education, and more research should be carried out on young girls who are out of school because this study did not include this category which may be experiencing a different challenge from those in school.

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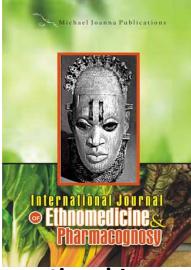
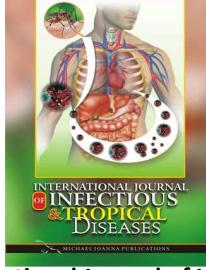
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