

Factors associated with teenage pregnancy and fertility in Nigeria

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Abstract

Teenage pregnancy and fertility are often debated in literature as reasons of health concern and as a social problem. In understanding the issues that are related to teenage fertility and pregnancy in Nigeria, the paper uses the 2008 Nigeria Demographic and Health Survey Data. A subset of women age 15 to 19 is extracted from the women data. The article sets to find out the variables that predict the odds of a teenager being currently pregnant, have borne a child in the five years preceding the survey as well as either currently pregnant as at the time of survey or having had a child in the last five years before the survey. The results show that apart from the age of the teenager, marital status is another strong predictor of the likelihood of being currently pregnant or having a child in the 5 years preceding the survey. An increase in age was associated with increase in the odds of being pregnant and of having born a child. Ensuring that female teenagers remain in school is vital to mitigating the negative outcomes of teenage pregnancy and child bearing. The treatise in this paper shows that teenage pregnancy and childbearing is a severe policy mediation area if the trend of population growth rate will be curtailed.

Keywords: Teenage Pregnancy, Fertility, Nigeria, Demographic, Health Survey

1. Introduction

Teenagers are neither children nor adults, but are in transition to adulthood. They constitute a high-risk group often highlighted in public debates (Gronqvist, 2012). One of the most important commitments a country can make for future economic, social and political progress and stability is to address the health and development needs of its young people (Federal Ministry of Health, n.d). Teenage pregnancy is a worldwide phenomenon affecting both developed and developing countries, it is a universal problem (Mersal et al., 2013; Kyei, 2012). Teenage pregnancy is the result of the fact that teenagers are sexually active.

Teenage pregnancy has not only become a public health issue, but also a media focal point, it is a major issue irrespective of the teenager's marital status (Chau-Kuang, 2013). Teenage pregnancy is one of the main issues in every health care system since early pregnancy can have harmful implications on girls' physical, psychological, economic and social status (Mersal et al, 2013). Teenage fertility, establishes the pace and level of fertility over a woman's entire reproductive life span (Panday, et al., 2009, UNICEF, 2005). Women who are married before the age of 18 tend to have more children than those who marry later in life and many young women get married before age 18 (UNICEF, 2005). In sub-Saharan Africa 70-80% of births to teenagers occur within marriage (World Health Organization, 2008). Teenagers who have never been married are significantly less likely to have entered motherhood (Marcen and Bellido, 2013). Early marriage remains common in developing countries (WHO, 2007, UNICEF, 2001). Cohabitation is relatively common in sub-Saharan Africa among teenagers (UNICEF, 2001) Childbearing within marital unions are wanted and planned (McQueston, et al., 2012).

Teenage pregnancy in a population is a veritable lens through which linkages between fertility and socio-economic variables can be examined (Sonfield, et al, 2013). It can also be seen as an early warning sign of inequality in a society (Barcena, 2013). Teenage girls undergo a lot of pressure to have sex, to look sexy and to conform to stereotypes of what the opposite sex sees as attractive (Rudd et al., 2013). Research has shown that educational level is a risk factor in teenage pregnancy (Chau-Kuang, 2013). The odds of teenage pregnancy decreased as educational status increased (Ayele, 2013). Thus implying that educational attainment is negatively associated with teenage pregnancy. The large size of the incoming youth cohorts are likely to result in increases in the absolute number of teenage births, even if adolescent birth rates remain constant (Marteleto and Dondero, 2013). Differentials in the levels of teenage pregnancy were observed across residence type, with higher pregnancy rate in the rural areas (Ayele, 2013). The 1998 SADHS reported almost double the fertility rate among teenagers in rural settings than among those in urban settings (Panday et al, 2009). Indeed, the odds of teenage pregnancy is higher in the rural areas than the urban areas (Ayele, 2013). Consequently, teenage motherhood is more pronounced in rural areas, where girls are married young and pressured to start having

children immediately (Population Reference Bureau, 2013).

Teenage pregnancy rate is not only high in developing countries it is also high in developed economies like the United Kingdom (Smith and Mills, 2012). In 2008, there were 16 million births to mothers aged 15–19 years, representing 11% of all births worldwide (World Health Organization, 2011). Almost 95% of these births occur in developing countries. In reality half of all the births occur in just seven countries, Nigeria, Ethiopia, Democratic Republic of Congo, Bangladesh, Brazil and the United States of America (World Health Organization, 2008). Large numbers of teenage mothers are a cause for social concern in many countries because of the adverse impact of teenage childbearing on the education and health of teen mothers and their children (Karra and Lee, 2012). According to UNICEF (2001), early marriage inevitably denies teenagers of the education they need for their personal development. Teenage motherhood under certain situations is acceptable while in others it is regarded as being a clog in the wheel of progress especially for the female teenager. The same may not be said about male teenagers who impregnates a female teenager, thus indicating a gender bias in the consequences of teenage pregnancy. In many parts of the world parents encourage teenage marriage in hopes that there will be financial and social benefits to the family (UNICEF, 2005). There is a school of thought that sees teenage pregnancy as a form of deviance on the part of the pregnant teenager (Breheny and Stephens, 2010; Cherrington and Breheny, 2005; Luker, 1996). Another school of thought justifies the need to examine and understand the issues relating to teenage pregnancy due to the likelihood of not just the pregnant teenager becoming economically disadvantaged, but can lead to a vicious cycle of teenage pregnancy (Wilson and Huntington, 2005).

Pregnancy among teenagers for some are unplanned while for others the same cannot be said due to the fact that such are either in marital unions or stable relationships (More and Rosenthal, 2006). Teenage pregnancy is higher in economically poor households (Ayele, 2013; Lee, 2002). Teenagers from the poorest households are more likely to become pregnant or give birth than those from the wealthiest households. According to the Population Reference Bureau (2013), in Zimbabwe, Senegal, Colombia, and Peru, more than one-quarter of teens ages 15 to 19 from the poorest 20 percent of households have begun childbearing. It is also reported that in Peru, the rate of early childbearing is nearly six times greater among those from the poorest households compared to the wealthiest. (Population Reference bureau, 2013). Low-income women are particularly likely to become pregnant as teenagers and to experience unintended pregnancy (Sonfield, et al 2013, Marcen and Bellido, 2013)

Teenage pregnancy and motherhood has remained a major health and social concern in Nigeria because of its association with likely higher maternal morbidity and mortality as well as child morbidity and mortality (National Population Commission and ICF Macro 2009). A teenage mother is exposed to immense physiological risks. The teenage pregnancy rate is an undeniably powerful indicator of the overall well-being in a population. The investigation of teenage pregnancy provides an opportunity for developing preventive strategies to improve population health (Chau-Kuang, 2013). Teenage pregnancy is often both a cause and a consequence of social exclusion (Babafemi and Adeleke, 2012). The fact that teenagers continue to be pregnant implies that there is the need to examine the underlying factors that may be responsible for such behaviours (Rudd, et al., 2013).

2. The situation of Teenage Pregnancy and Fertility in Nigeria

According to the 2006 population census figures teenagers constitute 22 percent of Nigeria's population. High teenage fertility is a major contributory factor to persistently high total fertility rate (TFR) and Nigeria's rapid population growth (Makinwa-Adebusoye, 2006). When a teenager starts having children the tendency is higher that such a person will not only attain her desired family size at the end of her reproductive age but will have more children than she would have loved to have if she did not start motherhood as a teenager. The resultant effects of early sexual activities, especially among the females most often than not is induced abortion and drop out from school, because most of them are not ready for pregnancy (Alika, 2012). As a result of teenage childbearing, the affected teenagers are likely to curtail their educational attainment because women who become mothers in their teens are more likely to curtail their education (Federal Ministry of Health, 2011).

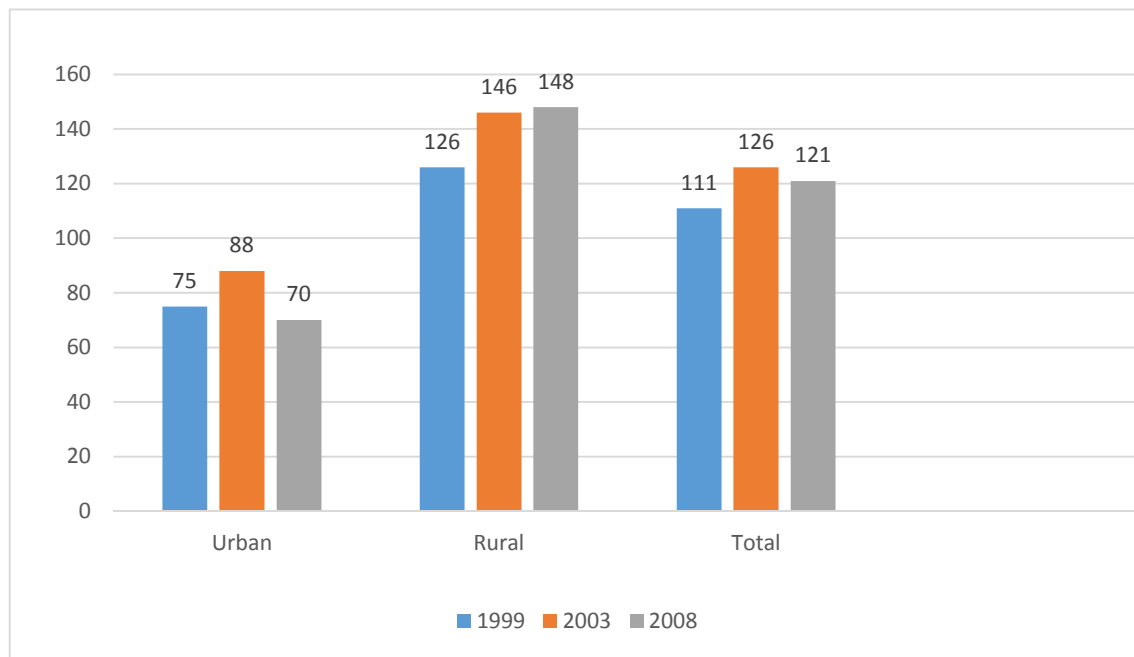


Fig 1: Fertility rate of teenagers 15-19 years in Nigeria 199-2008

An examination of the trend of fertility rate of the cohort of teenagers over the three rounds of the Nigeria Demographic and Health Survey (NDHS) show that fertility rate increased in 2003 compared to what it was in 1999 but declined in 2008 (Fig 1). The decrease only holds in the urban areas, the magnitude of fertility in rural areas over the three rounds is at least one and a half times that in the urban areas.

Nigeria is one of the top 21 countries in the world with highest rates of women 20-24 years old being married before their 18th birthday (World Vision, 2013). Preservation of girls' virginity and the perception that sexual activity should be within the context of marriage are part of the reasons for encouraging early marriage and teenage motherhood in Nigeria (Osakunle and Tayo-Olajubutu, 2012; Makinwa-Adebusoye, 2006). About 75 per cent of women age 15-49 years are currently married or have ever been married (National Population Commission and ICF Macro, 2009). Early marriage limits the opportunities for women to advance in educational attainment or to develop meaningful livelihood skills (Adamu et al., 2011, Makinwa-Adebusoye, 2006). Though teenagers in the core North (the North-East and North-West) still marry for the first time about four years earlier than their counterparts in the Southern part of Nigeria, but age at first marriage among teenagers is rising in the core North (Action Health Incorporated, 2011). The dangers posed by high sexual networking outside marriage characteristic of adolescent and female youth in the South-South can be equated with the same level of risk for adolescents in the northern states forced into early marriage and pregnancy (Community-Based Support [CUBS] Project for Orphans and Vulnerable Children in Nigeria, 2010).

According to Babafemi and Adeleke (2012) the social stigma that once attended out of wedlock pregnancy, especially among teenagers is declining, however the risks of serious health consequences remain for the teenage mother and her child. In some cultures, teenage pregnancy is regarded as norm, a god-given gift and proof of fertility of the female teenager (Babafemi and Adeleke, 2012). In Northern Nigeria parents and guardians who may be strongly in support of post primary education for their daughters would prefer to guarantee further education for daughters by executing pre-nuptial agreements that commit husbands to their young wives' education after marriage (Action Health Incorporated, 2011). In some parts of Northern Nigeria, there have been interventions aimed at encouraging the return of the teenage mothers to school. There are 'Adolescents-Friendly Schools' in Adamawa, Bauchi, Borno and Yobe States in the capital city of each state, that allows for the reintegration of married girls into formal education (Action Health Incorporated, 2011).

The drive of this study is to scrutinise factors related with Teenage pregnancy and fertility in Nigeria. This study addresses these issues by analysing data from the Nigeria Demographic and Health Survey 2008. Both descriptive and inferential analyses are attempted in order to elucidate the factors that are most responsible for teenage pregnancy and childbearing. First, the distribution of teenagers who were either pregnant or had a child

is discussed and second, the underlying associations between a teenager being pregnant and ever having borne a child are present in this investigation.

3. Data and Methods

In this analysis, the data from the Nigeria Demographic and Health Survey (NDHS) 2008 was used. The survey traditionally collects information on socioeconomic characteristics of individual women in the reproductive ages; in addition information is available in the data set concerning various reproductive health issues including pregnancy and child birth. For this reason, the NDHS 2008 data provides an opportunity to study teenage pregnancy and fertility in the country. The data for this paper consists of females in the teenage ages 15-19 years. This is because the primary goal was to describe the characteristics of the teenage sample from the NDHS 2008 and to examine the relative associations with the outcome variable. Overall a total of 6,591 females were selected for this analysis. Descriptive analysis was first used to compare the characteristics of teenagers across the different socioeconomic factors including: geo-political zones, residence, marital status, wealth index, educational level attainment, age and religion. At the second level of analysis, three logistic regression models are estimated predicting three outcomes: whether the individual teenager is currently pregnant; whether the individual bore a child within the five years preceding the survey; and whether the individual was either pregnant or had borne a child in the 5 years preceding the survey. In all the three models control variables were added to account for either mediation or confounding effects of these variables. Formally, these equations may be expressed as follows:

$$\text{Logit}[P(r=1)] = \beta_0 + \sum_{m=1}^n \beta_m X_m$$

Where logit $[P(r=1)]$ refers to the natural log odds that a respondent will have an outcome (in this paper three outcomes are being examined, namely respondent is currently pregnant, respondent had a child in the 5 years preceding the survey and respondent either is currently pregnant or had a child in the 5 years preceding the survey). Each of the outcomes are treated as different models. β_0 refers to the intercept of the regression model; and $\beta_m X_m$ refer to regression estimates for the set of explanatory variables (numbered 1 through n) included in each of these models. It must be stated that the fact that the NDHS data cannot ascertain causal effect relationship between attributed independent variables and the outcome variable of teenage pregnancy is a limitation. Nevertheless, it can show the associations between the independent variables and the dependent variable. Teenage pregnancy refers to pregnancy before age 20. The fact that the dataset consists of females who are within the 15-19 age bracket, reduces the chances of memory lapse compared with older women. Moreover for the recommendations to be valid recent experiences of teenagers is expedient. Background characteristics included in this article are marital status, wealth index, educational attainment, age, religion, geo-political zone and type of place of residence.

4. Results and Discussion

The descriptive findings presented in Table 1 show that about 47 percent of the teenagers have ever been sexually active and 43 percent were sexually active in the last 12 months preceding the survey. The median age at first intercourse is 15 years. About 1 of every 5 teenagers had a birth in the last five years preceding the survey and 7.5 per cent are currently pregnant. Close to a quarter of the teenagers are either currently pregnant or had given birth to a child in the last 5 years preceding the survey.

Table 1. Descriptive statistics for selected indicator variables in the logistic regression models 2008 Nigeria Demographic and Health survey (Women only).

Selected Variable/Category	Number of Women	Percent of Women in DHS Sample	Percent Ever sexually active	Percent sexually active in last 12months	Percent that had at least a birth	Percent currently pregnant	Percent of women either pregnant or ever had a child
Marital Status							
Never married	4537	68.8	23.2	19.6	3.1	0.8	3.8
Married	1950	29.6	99.2	94.9	53.6	22.7	68.8
Living together	57	0.9	100.0	93.0	64.9	19.3	77.2
Previously married	30	0.5	100.0	60.0	63.3	3.3	66.7
Not Living together	16	0.2	100.0	87.5	68.8	6.2	75.0
Not Stated/Missing	1	0.0	-	-	-	-	-
Wealth Index							
Poorest	1360	20.6	69.9	65.7	34.0	14.3	44.0
Poorer	1352	20.5	56.7	52.4	25.8	10.1	31.9
Middle	1378	20.9	43.2	39.0	16.1	6.2	20.7
Richer	1379	20.9	38.7	33.7	13.3	4.0	16.1
Richest	1122	17.0	21.9	19.6	3.4	1.9	4.9
Educational Attainment							
No education	1792	27.2	83.0	78.7	43.1	17.9	54.7
Incomplete primary	466	7.1	33.7	31.5	14.6	5.6	18.5
Complete primary	554	8.4	49.6	43.5	24.2	9.6	30.3
Incomplete secondary	2933	44.5	28.5	24.8	7.9	2.6	9.9
Complete secondary	773	11.7	40.4	35.4	5.8	2.3	8.2
Higher	73	1.1	34.2	32.9	2.7	0.0	2.7
Place of residence							
Urban	2027	30.8	31.2	28.2	10.2	4.1	13.5
Rural	4564	69.2	53.9	49.3	23.0	8.9	28.9
Geo-Political Zone							
North-Central	1264	19.2	38.5	32.8	16.3	6.8	21.2
North-East	1256	19.1	59.6	56.4	29.9	11.7	37.8
North-West	1245	18.9	70.6	68.9	34.7	15.3	45.0
South-East	774	11.7	24.8	17.8	6.7	2.1	8.4
South-South	1031	15.6	48.5	44.6	11.6	2.6	13.3
South-West	1021	15.5	28.0	24.1	6.8	2.4	8.4
Age							
15	1579	24.0	25.8	24.2	2.8	3.7	6.3
16	1225	18.6	33.2	30.1	9.1	4.9	13.2
17	1151	17.5	50.4	46.5	20.5	8.9	26.8
18	1634	24.8	62.2	56.9	30.6	10.6	37.2
19	1002	15.2	67.9	60.8	36.1	9.7	41.1
Religion							
Catholic	759	11.5	33.5	27.1	9.6	4.0	12.3
Other Christians	2843	43.1	34.9	30.2	10.0	3.0	12.2
Islam	2880	43.7	61.8	59.0	30.0	12.5	38.4
Others	109	1.7	61.5	54.1	33.0	16.5	42.2
TOTAL	6591	100.0	46.9	42.8	19.0	7.5	24.1

Table 2. Effects of selected explanatory variables on the log odds of a Teenager being currently pregnant (Model I); having borne a child in the five years preceding the survey (Model II) and either of the two options (Model III).

Selected Variable/Category	Model 1			Model 2			Model 3		
	Odds	95% C.I for Odds		Odds	95% C.I for Odds		Odds	95% C.I for Odds	
		Lower	Upper		Lower	Upper		Lower	Upper
Marital Status									
Married ^{RC}	1.00	-	-	1.00	-	-	1.00	-	-
Never Married	0.02*	0.02	0.04	0.02*	0.01	0.03	0.01*	0.00	0.01
Living together	0.62	0.29	1.31	0.52	0.26	1.02	0.33*	0.16	0.71
Previously married	0.11 ⁺	0.02	0.83	1.14	0.51	2.54	0.62	0.27	1.42
Not Living together	0.18	0.02	1.37	0.94	0.32	2.81	0.49	0.15	1.62
Age									
15	0.79	0.54	1.14	0.05*	0.04	0.08	0.08*	0.06	0.11
16	1.03	0.71	1.49	0.20*	0.15	0.27	0.24*	0.17	0.32
17	1.26	0.91	1.75	0.42*	0.32	0.54	0.48*	0.36	0.64
18	1.12	0.84	1.50	0.61*	0.48	0.77	0.64*	0.50	0.83
19 ^{RC}	1.00	-	-	-	-	-	-	-	-
Educational Attainment									
No education ^{RC}	1.00	-	-	1.00	-	-	1.00	-	-
Incomplete primary	0.90	0.57	1.43	0.81	0.55	1.18	0.86	0.58	1.28
Complete primary	1.32	0.91	1.91	1.14	0.82	1.59	1.55 ⁺	1.07	2.23
Incomplete secondary	1.14	0.76	1.69	0.88	0.64	1.22	1.22	0.87	1.73
Secondary(Minimum)	0.88	0.48	1.61	0.35*	0.22	0.56	0.49*	0.31	0.77
Religion									
Islam ^{RC}	1.00	-	-	1.00	-	-	1.00	-	-
Catholic	1.40	0.82	2.39	1.26	0.81	1.96	1.62	1.00	2.62
Other Christians	1.37	0.92	2.05	1.86*	1.32	2.62	2.70 ⁺	1.85	3.96
Others	1.63	0.91	2.91	1.40	0.79	2.47	1.76*	0.93	3.31
Wealth Index									
Poorest ^{RC}	1.00	-	-	1.00	-	-	1.00	-	-
Poorer	1.01	0.79	1.31	1.10	0.88	1.38	1.00	0.79	1.26
Middle	0.98	0.72	1.35	0.84	0.64	1.09	0.81	0.61	1.06
Richer	0.78	0.51	1.18	0.97	0.70	1.33	0.80	0.57	1.11
Richest	0.84	0.46	1.55	0.38*	0.23	0.62	0.35*	0.22	0.56
Place of residence									
Urban	1.18	0.85	1.62	0.97	0.75	1.25	1.18	0.91	1.54
Rural ^{RC}	1.00	-	-	1.00	-	-	1.00	-	-
Geo-Political Zone									
North-West ^{RC}	1.00	-	-	1.00	-	-	1.00	-	-
North-Central	1.00	0.72	1.41	1.10	0.82	1.47	1.23	0.90	1.67
North-East	0.97	0.76	1.24	1.17	0.94	1.46	1.16	0.92	1.46
South-East	0.86	0.44	1.69	1.51	0.91	2.50	1.53	0.92	2.53
South-South	0.97	0.54	1.77	2.86*	1.86	4.39	2.59*	1.68	3.98
South-West	1.15	0.67	1.96	1.78*	1.16	2.74	1.85*	1.19	2.86
Constant		0.26*			2.61*			4.67*	
Classification		92.5			87.8			89.5	
-2Log likelihood		2567.13*			3535.46*			3485.03*	

+ Significant at 0.05

* Significant at 0.01

The result show that about 3 out of every 10 teenagers are currently married. In the last 12 months preceding the survey 19.6 percent of teenagers who have never been married have been sexually active, and about 4 percent were either currently pregnant or had already born a child. Though the proportion of those cohabiting, previously married and those not living together are small but at least two-thirds were either currently pregnant or had borne a child. Those who have never been married or have been previously married are significantly less likely to be currently pregnant relative to those in marital unions (Table 2). Marital status is the only variable

that significantly affects the occurrence of teenage pregnancy. The results show that only women who have never been married are significantly less likely to have had a child in the last 5 years preceding the survey relative to those in marital unions (Table 2).

The findings in this paper also suggest that pregnancy and childbearing increase with age of the female Teenager. The odds ratio of having had a birth in the last 5 years preceding the survey increases with age. Younger teenagers are significantly less likely to have had a birth in the last 5 years relative to a 19 year old teenager. The latter is expected given that the proportion of women who have started their reproductive life increases with age because of longer exposure especially due to the marriage factor.

Teenage fertility is highest among teenagers from the poorest household. The fact that the proportion of teenagers who are sexually active in the last 12 months preceding the survey and those currently pregnant is lowest among teenagers from the richest household portends that poverty may likely be a reason for becoming sexually active or marrying early. The findings further revealed that those in the richest wealth quintile had the least odds of being currently pregnant compared to the poor. The pathways of this influence could be that the poor tend to marry at an early age, while those in the richer groups continue with their education and other career goals. It may also be that the teenagers from poor households become sexually active due to their poverty status.

Teenagers with a minimum of secondary education are significantly less likely to have had a birth in the last 5 years preceding the survey relative to those without any formal education. Also those with a minimum of secondary education are less likely to be currently pregnant relative to those with no formal education. The same is not true for those with either primary or incomplete secondary education who are more likely to be currently pregnant relative to those without formal education, even though not statistically significant. The implication is that retention of the girl child in schools reduces the chances of being pregnant. This is further buttressed by the fact that the odds of a teenage girl with primary education is significantly more likely to either be currently pregnant or have had a child in the 5 years preceding the survey.

There is no statistically significant difference in the fertility of teenagers resident in urban and rural areas. The odds of being currently pregnant is least among the teenagers in the South-East and South-South geo-political zones. The fact that teenagers in the South-South and South-West geopolitical zones are significantly more likely to have had a child in the last 5 years preceding the survey is an indication that the problem of teenage pregnancy and motherhood is not peculiar to a particular part of the country. This study revealed that there were some zonal differences in teenage motherhood and that these were significant in South-South and South-West geo-political zones of the country where the odds of teenage motherhood were significantly higher compared to the North-West geo-political zone.

5. Conclusion

This study set out to explore the factors that are associated with teenage pregnancy and teenage child bearing in Nigeria. The outcome of the analysis leads us to come up with a few conclusions and policy recommendations. First of all, age variable appears to be the single most important factor determining pregnancy and child bearing among teenagers. Early marriage plays a significant role in the occurrence of teenage pregnancy. Thus, it is more expedient for there to be targeted programmes/interventions directed at enlightening teenagers, households and communities on behaviour change that will encourage delayed entry into marital unions.

Ensuring that teenagers remain in school to secondary level of education may be a way out of reducing the negative outcomes of teenage pregnancy and child bearing. This is because only those who are have only primary level of education are significantly more likely to either be currently pregnant or have a child in the 5 years preceding the survey. Thus buttressing the knowledge that education often provides positive effects on delaying pregnancy and child bearing.

Poverty may be a contributing factor to teenage pregnancy and teenage child bearing, for only teenagers from the richest quintile households are significantly less likely to be currently pregnant or have a child in the 5 years before the survey. It is important that households from richest wealth quintiles are likely to be able to send their female teenagers to at least secondary level of education. Therefore ensuring that policies and programmes ameliorating poverty are more effective could prove effective in reducing pregnancy and child bearing rates in Nigeria. The results of the analysis suggests that there is the need for targeted interventions to focus on teenagers in the South-South and South-West geo-political zones as well as the North-West geo-political zone which is the reference for the analysis. This is vital in that before now when the issues of teenage pregnancy and child bearing are discussed focussed is only made to areas of the country known for early marriage due to religious and cultural beliefs. The issues associated with Teenage pregnancy and childbearing in Nigeria are

enthraling and vital for both health, economic and social concerns. It is anticipated that enriched understanding of the factors associated with Teenage pregnancy and child bearing will lead to better social policies, ultimately reducing Teenage pregnancy and childbearing in Nigeria and elsewhere.

While this study has enriched the understanding of the factors that are associated with teenage pregnancy and child bearing, there is still the need for further research on the norms and behaviours of teenagers as they relate to pregnancy and childbearing. The attitude and reactions of the community to the issues also require further research among others. Further studies should also measure the perceptions of negative social sanctions for pregnant teenagers, which relate to the presence or absence of norms against Teenage pregnancy. The enriched understanding of these links is central to developing enhanced social policies that will cause a reduction in teenage pregnancy and childbearing in Nigeria.

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