

## SEXUAL BEHAVIOUR OF TEENAGE WOMEN IN NIGERIA, 1990-2008: DEMOGRAPHIC IMPLICATION

**Helen N. Avong**

ECWA Theological Seminary Kagaro, Kaduna State

### **Abstract**

The study aimed at examining sexual behaviour and fertility trends of 15-19-year-old teenagers in Nigeria using findings from national surveys of 1990-2008 and 2000 Sentinel Survey. The pulled information, analysed by comparing findings across surveys, reveals negative sexual behaviour of early initiation of sexual intercourse, high sexual activity, large proportion of high risk sex and very low contraceptive prevalence. The trend in these measures of sexual behaviour is minimal declines between 1990 and 2008 and, supporting the modernisation theories, small increases in contraception in the same period. Greater effort by all stakeholders is required to diligently execute programmes encouraging sexual abstinence and use of contraceptives, considered important for ensuring teenage responsible and healthy sexual behaviour. This is necessary if the large teenage births, which are raising the national fertility rates substantially, are to significantly decline. It is further suggested that all acceptable research approaches that would help reveal both overt and covert factors responsible for this seeming failure of fertility reduction policies, programmes and strategies, especially in Northern Nigeria where teenage childbearing and fertility rates are much higher.

**Keywords:** *Teenage sexual behaviour, Trend, Contraception, Fertility, Nigeria*

### **Background to the Study**

Sexual behaviour, measured by factors such as sexual activity defined as sexual intercourse within the three months prior to a survey, age at first sexual intercourse and risky sexual behaviour determine the incidence or prevalence of sexual intercourse and subsequently, the incidence of childbearing and fertility rates, especially in the absence of contraception. Sexual behaviour has been observed to vary among teenagers from society to society (see Kothari, Wang, Head, & Abderrahim, 2012). For example, in some developed countries in the early 1990s, about two thirds, and as high as 80 percent teenage women in others, initiated sexual intercourse (UNICEF, 2001:13). In contrast, in developing countries like Nigeria, only about a quarter had done so in the same period (NPC, 1992; Kothari, et al., 2012). Furthermore, the patterns of sexual behaviours are expected to change with increasing secularisation as modernisation takes effect in traditional or less developed societies.

Sexual intercourse, viewed as sacred in the African traditional societies, is a proximate determinant of fertility. Modernisation theories argue that the cultures, societal institutions, internalised values and, subsequently, fertility behaviours of Africans are changed by social change and economic development. In particular, the classical demographic transition theory, a variant of modernisation theory (Greenhalgh 1994:9), posits that socioeconomic development is the main determinant fertility behaviour (Notestein 1945, 1953; Preston 1978). Applying this modernisation theory to the family formation domain, the

socioeconomic changes alter the costs and benefits of children thereby resulting in a rise in age at first marriage and consequently the age at first sexual intercourse as well as lower fertility desires and increased acceptance and use of modern contraceptives.

Furthermore, the classical demographic transition theory considers culture (ethnicity, language and religion) to play a vital role in behaviours determining fertility levels (see Greenhalgh 1994). The African traditional culture, which hinges on religion and places high value on children, is expected to change with modernisation and allow the imbibing of small family size ethics and fertility decline. Nigeria is a developing country with a large population (over 140 million with 11 percent in age group 15-19) being increasingly influenced by the modernisation factors imported from developed modernised countries therefore, it is appropriate to assess the trends in teenage sexual behaviour over almost two decades and their fertility implications in the light of the modernization theories. However, it must be mentioned here that some post modernisation theorists argue that the spread of electronic communication and mass media has rendered the modernization theory, with its notion of unilinear progress in social, economic and attitudinal spheres irrelevant or even dead while others view it as still alive, advancing and still relevant (Giddens, 2009) for examining and understanding certain behavioral trends in the developing world, particularly Africa.

In West Africa, the percentage of never married teenage women who had had sexual intercourse at least once, in the 1990s, ranged between 12 in Niger and 34 Benin Republic (Kothari, et al., 2012) and in particular, the percentage of this category of women was below 30 percent in Nigeria compared to over 40 percent in the US in the early 21<sup>st</sup> century (NPC & ORC Macro, 2004; NPC & ICF Macro 2009; Martinez, Copen & Abma, 2011; Kothari, et al., 2012). This suggests that some internalised values relating to sexual behaviour, cherished and sanctioned by most African societies, are undergoing change with modernisation and possibly resulting in sexual behaviour that affects the health and fertility of young women.

Negative sexual behaviour, especially high-risk sexual intercourse, is believed to have made the HIV pandemic worse therefore sexual behaviour is one of the eight focal areas identified by the National Adolescent Health Policy launched in 1995 for reducing morbidity among young people, enhancing adolescent health and general wellbeing and national development (Federal Ministry of Health [FMH], 2009). Furthermore, over the years, steps taken by governments to address sexual behaviour issues include development of a number of strategic frameworks, introduction of family life and HIV education (FLHE) curriculum, conduct of NDHS and national HIV/AIDS and reproductive health (NARHS) surveys and the use of a multi-sectoral approach.

The effect of these strategies and other programmes meant to improve the sexual and reproductive health of the young people has been documented in the various survey reports. For instance, age at first sexual intercourse has increased for the country with higher a proportion of women age 20-49 years (31.2 percent) having sexual intercourse before age 15 years in 2003 than the 20.4 percent reported in 2008 (NPC & ORC Macro 2004:88; NPC & ICF Macro 2009:97). Furthermore, almost all 15-24-year-old never married women engaged in high risk sex in the past 12 months preceding the 2008 survey but only 36 percent used male condom (NPC & ICF Macro 2009:230). However, the reported findings need to be pulled together and examined as a trend for better evaluation of the effectiveness of the programmes, strategies or frameworks affecting the sexual behaviour of the teenagers. Moreover, the incidence of sexual intercourse among teenagers is declining in some regions of the world. For example, in the US, lower proportions of

teenagers have been reporting having ever had sexual intercourse since 1995 (Abma et al., 2004). It is therefore important to examine the trend of sexual behaviour among the teenagers in Nigeria.

The modernisation theories also imply that as modernisation takes effect in a developing society, the population becomes more informed and receptive to mass media and favourable attitudes toward Western education which empowers women economically and equips them for adopting new innovations, including modern contraceptive methods. Thus, modernisation enhances acceptance and use of contraceptives which serve the dual purpose of reducing the spread of sexually transmitted infections (STIs) and young women's fertility rates.

Knowledge of family planning methods, a prerequisite for contraception, has greatly improved among teenage women in most sub-Saharan African nations (Aboyeji et al., 2001). In Nigeria, the Revised 2001 National Population Policy (NPP), in order to affect attitude and "behavioural change to fertility regulation and contraception" has the promotion of fertility regulation and contraceptive methods as one of its key components (NPC, 2002:58). The mass media has been effectively used since the 1980s (Avong, 2000) thus knowledge and use of contraceptives has been spreading nationally and has contributed to the gains in fertility decline (NPC, 2000). Hence, contraceptive prevalence rate (CPR) increased from 12.6 percent in 2003 to 15 percent in 2008 and use of modern methods, which is greater than the use of traditional methods, increased by two percentage points (NPC & ICF Macro, 2009:72). As found for other sub-Saharan Africa, condom use did not increase significantly in Nigeria (NPC & ICF Macro, 2009; Kothari et al., 2012). However, how the teenagers are influenced by the promotion efforts has not been examined to determine the trend. Furthermore, using DHS reports, a study has carried out a worldwide analysis of the trends in sexual behaviours of teens but the examination of the trends for specific countries was sketchy (Kothari et al. 2012). Therefore, there is need for a detailed analysis for the purpose of providing more detailed information for formulating effective policies and developing appropriate programmes that successfully address needs relating to sexual behaviour that might be peculiar to Nigerian teens.

### **Purpose of the study**

The purpose of this study is to examine the trend in sexual behaviour among teenage women aged 15-19 in Nigeria. This should provide information needed by policymakers and other stakeholders for formulation and implementation of effective programmes and strategies for positively affecting the sexual behaviour of this large group of the Nigerian population. Contraception is a proximate determinant of fertility and consequently has great demographic implications therefore, it is important to examine its trend for the purpose of finding out its relationship with sexual behaviour and its fertility inhibiting role among the teenage women in Nigeria. Socioeconomic status affects both sexual behaviour and contraception therefore this is examined in relation to trends in contraception and sexual behaviour. The main demographic implication to be examined is age-specific fertility rates (ASFRs) of the 15-19-year-olds which will be studied in order to explain its possible contribution to the national fertility levels.

### **Research question**

What are the trends in teenage sexual behaviour, contraception, socioeconomic status and ASFRs?

### **Data and Methods**

All findings presented for the examination of the trends in teenage contraception, household socioeconomic status, sexual behaviour, ASFRs come from the 1990, 1999, 2003 and 2008 Nigeria Demographic and Health Surveys (NDHS), the 2000 Sentinel Survey and the 1991 and 2006 census

reports. A multi-stage sampling design was used for the selection of households from which a large nationally representative samples of women age 15-49, was derived for the surveys. The series of questions for obtaining information about these variables or factors were presented as appendices in the NDHS reports (NPC, 1992:174-241; NPC, 2000:229-320; NPC & ORC Macro, 2004:243-331; NPC & ICF Macro, 2009:499-620).

The analysis employed is comparison of findings across survey since the measures used in this study are comparable across all the surveys. Age at first sexual intercourse is captured in each of the surveys. The NDHS asked the same questions on heterosexual intercourse. Although the actual question on ever having had sexual intercourse does not add the phrase "with a man" the item, "Have you ever been married or lived together with a man?" immediately precedes the one on sexual activity in the 2003 and 2008 NDHS. For the 1990 and 1999 NDHS, heterosexual intercourse must have been assumed since any other mode of sexual intercourse was and is still not culturally or officially recognized or acceptable in Nigeria. Information on high risk sex was clearly captured and analysed only in the 2003 and 2008 NDHS. Furthermore, contraception by unmarried women was not analysed using the conventional age groups in the 2003 NDHS report so, the findings for 15-49 age group is presented only for information. Information on other age groups are also presented to highlight the performance of the teenagers on the sexual behavior indicators under examination.

#### **Clarification of concepts/indicators**

Sexual behaviour in this paper includes age at first sexual intercourse, premarital sex, sexual activity and high risk sex. The age at which a woman initiated her first sexual debut is the age at first sexual intercourse while premarital sex is having sexual intercourse before marriage. Sexual activity is having had sex within the past three months (NPC, 2000; NPC & ICF Macro, 2009) and high-risk sex is sexual intercourse with a non-marital and non-cohabiting partner, that is, "engaging in sexual intercourse with someone other than a spouse or partner with whom one is living..." (NPC & Macro, 2004:182). Contraception is the use of family planning methods defined as "a conscious effort by a couple to limit or space the number of children they want to have" (NPC & ICF Macro, 2009:63) or by unmarried people to avoid pregnancy, childbearing and STIs through the use of contraceptive methods. Contraceptive methods are categorised as modern and traditional methods of family planning (see NPC & ICF Macro, 2009; Avong, 2013:22). The AFSRs are calculated using information about births which occurred within the three-year period prior to the survey, classified by the age of the childbearing woman, within the five-year age groups, at the time the child was or children were born (NPC & ICF Macro, 2009).

#### **Results and discussion**

In addition to being an important factor in determining fertility in the absence of contraception, early age at first sexual intercourse is an important factor for public health policy makers saddled with finding measures to curb unhealthy sexual behavior leading to the spread of STIs and high incidence of pregnancy and childbearing among teenagers (NPC & ICF Macro, 2009; de Irala, Osorio, Carlos, Miguel & Burgo, 2011). To gain information on age at first sexual intercourse in Nigeria, the women were asked how old they were when they had their first sexual intercourse and this has provided the findings used in this study. This is better than employing age at first marriage which is often used as a proxy for determining age at first sexual intercourse (NPC & ICF Macro, 2009).

Trend in age at first sexual intercourse can be examined using cohort analysis or inter-census or survey periods. Generally the proportion that had first sexual intercourse before age 15 or 18 at each age group was

higher among the older cohorts and declines steadily across the cohorts of women (Table 1). This pattern is clearer for 2003 and 2008. It implies that age at first sexual intercourse has been rising. The inter-survey data shows, like many other countries (Kothari 2012), there was a decline of about nine percent for age 15-19 who engaged in sexual intercourse

**Table 1:** Percentage of women age 15 -49 according to age at first sexual intercourse and recent sexual activity by some background characteristics, Nigeria 1990-2008

Background characteristics	Proportions who had first sexual intercourse by exact age							
	1990		1999		2003		2008	
Age	15	18	15	18	15	18	15	18
15-19	24.4	NA	16.2	NA	20.3	NA	15.3	NA
20-24	29.7	63.0	20.7	49.4	21.2	54.1	16.2	47.8
25-29	31.2	62.1	24.0	49.1	26.7	55.5	17.8	48.5
30-34	32.8	67.4	26.4	53.7	34.2	63.5	22.2	51.4
35-39	27.8	63.0	25.9	51.9	36.6	65.4	20.4	54.3
40-44	31.1	61.1	28.4	51.7	42.0	66.5	26.1	55.4
45-49	27.6	62.3	22.2	48.7	42.7	70.7	27.5	58.4
20-49	30.4	63.4	24.3	50.6	31.2	60.5	29.4	51.5
Never had sex (15-19)	45.6		56.9		48.9		53.8	
Median age at first sexual intercourse (20-49)	16.3		17.9		16.7		17.8	
	Sexually active within four weeks preceding survey							
15-19	66.3		24.6		33.5		29.7	
20-24	65.8		49.2		55.3		53.3	
25-29	58.7		60.6		63.7		64.2	
30-34	61.1		58.2		67.4		67.5	
35-39	57.7		61.2		70.1		69.1	
40-44	56.8		55.4		66.9		66.3	
45-49	52.5		38.0		59.5		57.7	
All	60.6		48.4		56.4		56.2	
<b>Marital status</b>								
Never married	58.8		14.5		15.1		16.7	
Married and living together	na		na		73.7		72.7	
Divorced/separated/widowed	na		na		19.7		14.5	

**Sources:** FOS & IRD Macro, 1992:62, 64; NPC, 2000:79, 82; NPC & ORC Macro, 2004:88, 90; NPC & ICF Macro, 2009:97, 99

Note: NA means figures were not available as analysis was not based on marital status but marriage duration.

By exact age 15 and 11.9 percent for women who engaged in sexual intercourse by exact age 18 (Table 1). This declining trend tends to suggest either the effect of a rising age at first marriage (NPC & ICF Macro, 2009) when sexual intercourse is initiated by some or that the liberalising effect on African sexual values and behaviour by modernisation and social change may not be as much as anticipated by the modernisation perspective. Although the median ages at first sexual intercourse and first marriage are on the rise, they are still in the teen ages indicating that half of Nigerian women initiate sexual intercourse in their teenage either within or outside marriage. However, there are also variations by regions in the country. Early marriage and hence very early initiation of sexual intercourse and childbearing is acceptable in the predominantly Muslim North for cultural and religious reasons, but not in the predominantly Christian South (Avong, 1999; Aboyeji et al., 2001). This may have very grave implications for childbearing, fertility levels and health



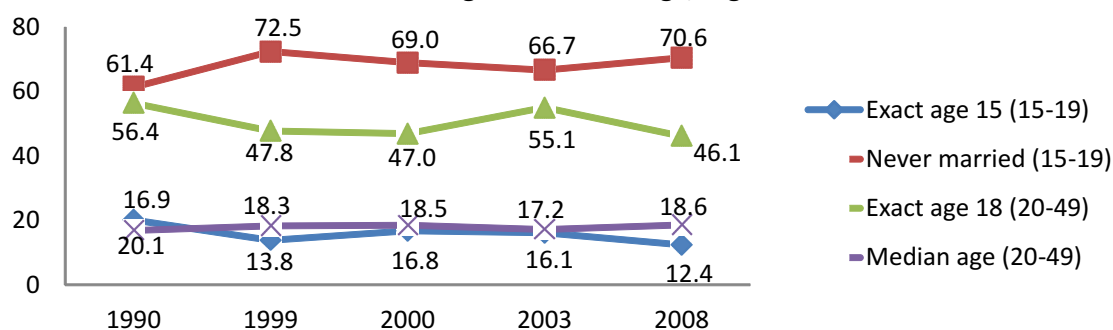
status of women and consequently, negative impact on socioeconomic and health status of especially women in the North and national development.

Premarital sex has grave social and health consequences especially for teenagers in most African societies. There are often variations in attitudes toward premarital sexual intercourse by region and within countries. For instance, premarital sexual intercourse is more tolerable in some developed societies than others, and in Nigeria, premarital sex is culturally accepted in some societies in the South but not in the North (Avong, 1999). Premarital sex is examined first, through comparison of exact ages at first marriage and secondly, using information on sexual intercourse among unmarried women.

Sexual intercourse precedes marriage in many societies including sub-Saharan Africa where chastity, before marriage, was and is still cherished (Avong, 1999; Avong, 2013) even though the ongoing of modernisation of the Nigerian society seems to be encouraging accepting attitudes towards premarital sex. All the proportions of those who had sexual intercourse by exact ages 15 and 18 are higher than the proportions of those who got married at the same ages indicating that sexual intercourse precedes marriage in Nigeria. For example, in 1990, by ages 15 and 18, 24 and 63 percent of women in age groups 15-19 and 20-49 respectively had had sexual intercourse whereas 20 and 56 percent had married respectively

(Table 1; Figure 1).

**Figure 1: Proportion of women according to exact age at first marriage, never married and median age at first marriage, Nigeria 1990-2008**

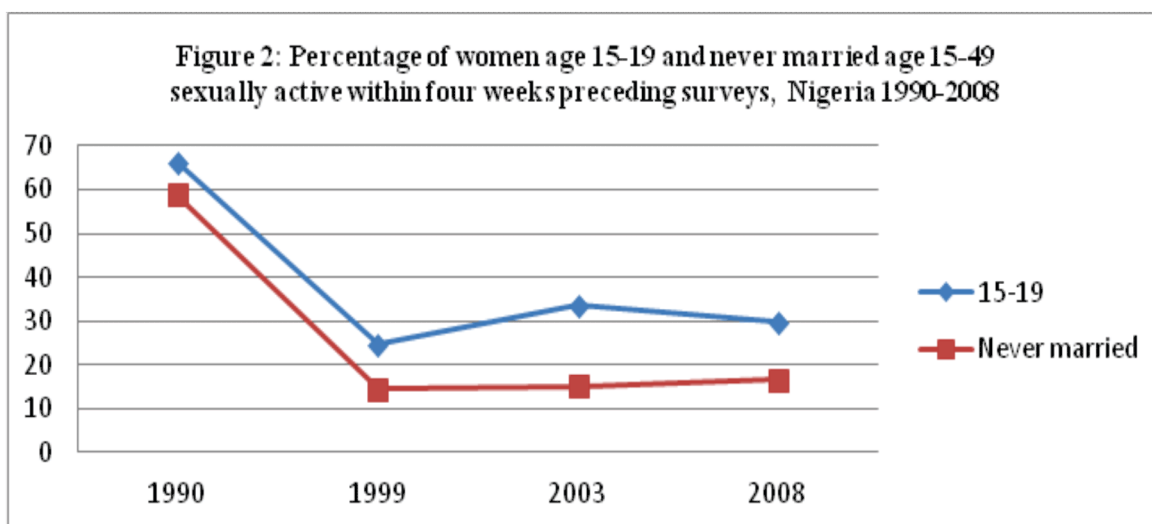


**Source:** NPC & IRD Macro, 1992: 60; NPC, 2000: 77; NPC & ORC Macro, 2004:86  
 NPC & ICF Macro, 2009:94

Teenage unmarried women engaged in premarital sex declined from 23 percent in 2003 to 20 percent in 2008 (NPC & ORC Macro, 2004:190; NPC & ICF Macro, 2009:228). The 2008 NDHS data revealed larger proportions of 18-19-year-old never married teenage women engaged in premarital sex than the 15-17-year-olds (NPC & ICF Macro, 2009:228). About 32 percent 18-19-year-old never married teen women compared to 13 percent of the 15-17-year old counterpart had premarital sex 12 months preceding the survey. This shows that while modernisation factors increase the age at first sexual intercourse, they are changing the negative attitude towards premarital sex among young people to an accepting one especially as they grow older. It also supports the fears by certain groups about sexual consequences of delayed marriage which might have resulted in marrying daughters off early and thus early teen childbearing and higher fertility rates, especially in Northern Nigeria (NPC & ORC Macro, 2004; NPC & ICF Macro, 2009; Avong, 2012, 2013).

Generally, the proportions of teenage women who had never had sexual intercourse or were never married as at the time of survey increased between 1990 and 2008 even though there were slight drops in the proportions between 1999 and 2003 (Figure 1). This suggests the number of teenage women engaging in sexual activity within and outside marriage is declining as supported by the decline in the proportions which had sexual intercourse by exact age 15 and 18 implying efforts to positively influence sexual behaviour are having some desired effect.

Recent sexual activity information serves the important purpose of refining the exposure to pregnancy measurement (NPC, 2000). The proportion of teenage women sexually active four weeks prior to surveys decreased sharply between 1990 and 1999 but increased from about 25 percent in 1999 to 34 per cent in 2003 only to decline by four percentage points between 2003 and 2008 (Table 1; Figure 2). A similar trend can be observed among the never married sexually active women (Table 1; Figure 2).



Sources: FOS & IRD Macro, 1992:64; NPC, 2000:82; NPC & ORC Macro, 2004:90; NPC & ICF Macro, 2009:99

The sharp decline between 1990 and 1999 could partially be explained by the large increase in the never married proportion from 61 percent in 1990 to 73 percent in 1999 or rise in age at first marriage (Figure 1), which is one of the effects of modernisation factors. However, the sharp decline of sexually active proportions by age and marital status, between 1990 and 1999 could also be due to underestimation of indicators observed for the 1999 NDHS (NPC, 2002; NPC & ORC Macro, 2009; NPC & ICF Macro, 2009). The proportions of sexually active women age 15-49 decreases as the level of education increases suggesting education, a modernising factor, might be empowering the women to have control over their sexual life. The proportions of the sexually active women with no education are much higher than those of the educated and steadily increased from 61.3 percent in 1999 to 72.7 percent in 2008 (NPC, 2000: 82; NPC & ORC Macro, 2004:90; NPC & ICF Macro, 2009:99). This pattern is most likely to apply to teenage women whose large number of births is believed to contribute to the high fertility level of the country (FGN, 2004).

High-risk sex, the sexual intercourse with a non-marital and non-cohabiting partner, results in unwanted pregnancy and spread of STIs except when condom is used to reduce the risk of pregnancy and transmitting

infections. Among those who reported being sexually active 12 months preceding the 2003 and 2008 surveys, the proportion of over 30 percent teenage women engaged in high risk sex is unacceptably high especially as condom use by this group is very low, even though it generally increased between 2003 and 2008 (Table 2; Figure 3).

**Table 2:** Percentage of sexually active women age 15-24 years who engaged in high risk sex and used condom by some background characteristics, Nigeria 2003-2008

Background characteristic	2003		2008	
	High risk sex in past 12 months prior to survey	Used condom during last high risk sex	High risk sex in past 12 months prior to survey	Used condom during last high risk sex
<b>Age</b>				
15-19	34.6	22.0	33.3	28.6
20-24	25.8	26.0	26.3	40.5
<b>Marital status</b>				
Never married	99.7	25.3	96.5	36.0
Ever married	3.7	(11.4)	1.5	22.9
<b>Economic status</b>				
Lowest	16.6	14.0	7.6	11.0
Second	20.4	12.6	15.4	21.0
Middle	21.8	12.6	29.8	27.8
Fourth	36.1	24.0	44.0	28.2
Highest	53.3	37.5	54.9	47.4
15-24	29.4	24.0	28.8	35.5

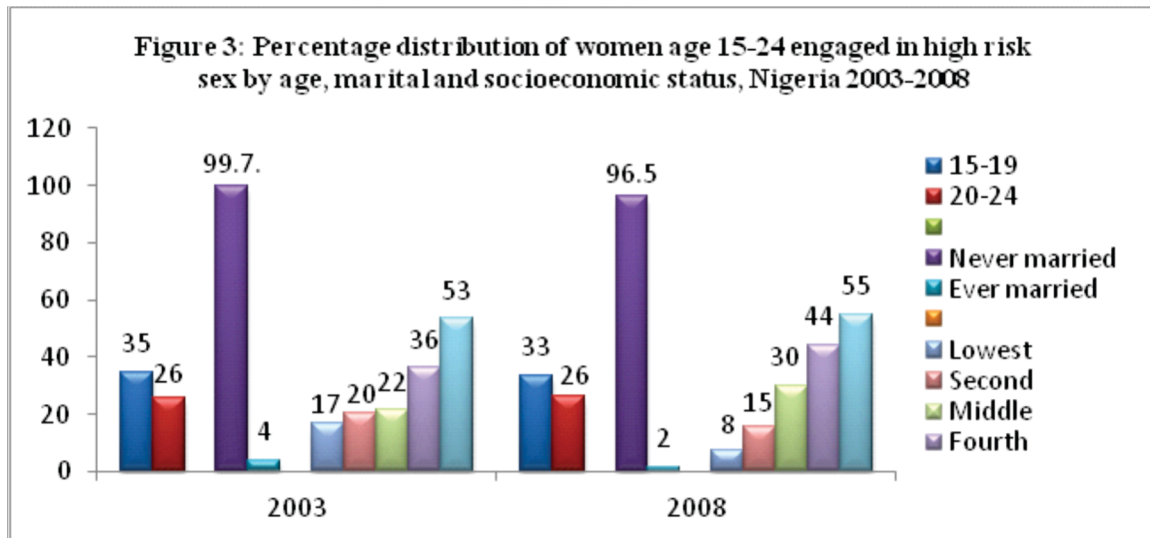
Sources: NPC & ORC Macro, 2004:183, 184; NPC & ICF Macro, 2009:230

Note: Figures in parenthesis are based on 25-49 unweighted cases

However, the percentage of teenagers having high risk sex declined from 39 percent in 1999 (Kothari, et al., 2012:36) to 33 percent in 2008 while condom use increased from 24 percent in 2003 to about 36 percent in 2008 (Table 2). There is an inverse relationship between age of the women and high risk sexual behaviour (NPC & ORC 2004; NPC & ORC 2009) suggesting a dangerous trend of increasing high risk sex among younger cohorts. In addition, the proportion of almost a hundred percent of sexually active never married women, a category most 15-19-year-olds fall, engaging in high risk sex in the past 12 months preceding the surveys of 2003 and 2008 is worrying.

Almost all of the never married women, but only an insignificant number of ever married women, were involved in unhealthy sexual behaviour in 2003 and 2008 (Figure 3). This has grave health and demographic consequences for the teenagers, who form the bulk of the 15-24 years never married group (68% in 2003 and 66% in 2008). The proportions of those engaged in this sexual behaviour increased as the socioeconomic status of the household within which the women live increased. It steadily increased from 17 percent in 2003 and eight percent in 2008 for the lowest economic category to 53 percent and 55 percent respectively for the highest wealth category (Figure 3). However, while the proportions of those in the first two lower socioeconomic statuses greatly declined, those of the three higher socioeconomic statuses increased between 2003 and 2008.





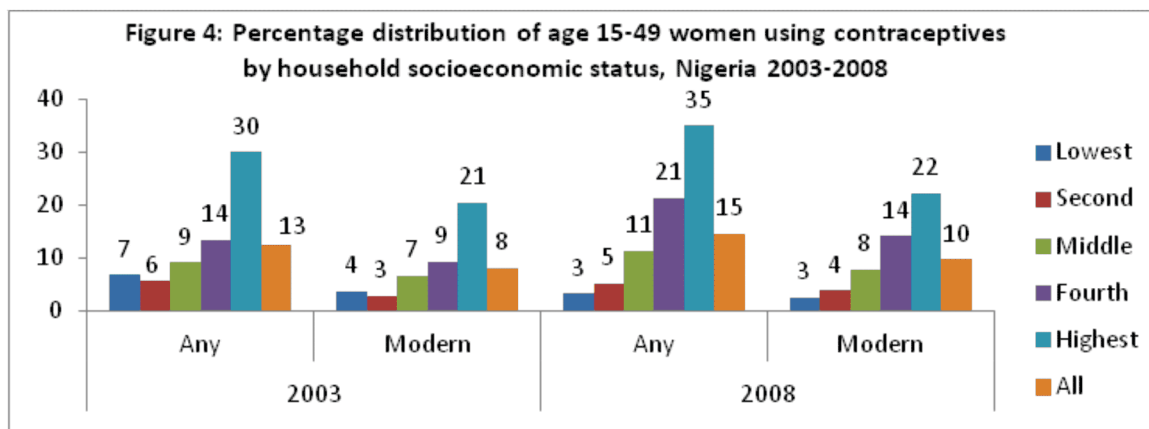
Sources: NPC & ORC Macro, 2004:183, 184; NPC & ICF Macro, 2009:230

This is surprising since programmes highlighting the health consequences of risky sex behaviour can be expected to have greater effect on the women in higher socioeconomic households, who have greater access to education and the mass media and better bargaining power with their sexual partners. There is the need to investigate this trend for policy and programme implementation purposes.

Furthermore, the positive association between socioeconomic status of the women and high risk sex is worrying. It reveals the effect of modernisation factors such as greater access to the mass media, especially the TV, and intoxicating substances as well as depression and low self-esteem found to encourage risky sex behaviour (Bell et al, 2004; Jayakody, Viner, Curtis, Sinha, & Roberts, 2005; Engle, Ladin; Brown & Kenneavy, 2006; NPC & ICF Macro, 2009). Religiosity was found to encourage responsible sexual behaviour in London (Jayakody et al., 2005; Wong, 2012). Therefore, there is the need for greater effort by policy makers and programme designers and implementers including religious leaders, to adopt and diligently execute programmes that encourage sexual abstinence and use of contraceptives which are key elements in the 2001 Revised NPP for encouraging “responsible and healthy reproductive and sexual behaviour” (FGN, 2004:42). This will not only reduce the large teenage births believed to be one of the reasons for high fertility in the country (FGN, 2004) but help curb the spread of STIs and HIV/AIDS pandemic.

Knowledge of family planning methods is believed to be necessary for taking steps to access and use suitable and effective contraceptives for protection against STIs or for fertility control (NPC & ICF Macro, 2009). For example, a study in Nigeria, in 1989, showed over half the respondents (60.4 percent), who reported their pregnancies were unplanned, claimed they had never had access to information on contraception (Alade, 1989). Although knowledge of family planning methods has improved, from 46 percent in 1990 to 72 percent in 2008, among all women in Nigeria (FOS & IRD Macro 1992:37; NPC, 2000; NPC & ORC Macro, 2004; NPC & ICF Macro, 2009:65). A similar trend in knowledge of contraception is observed among the currently married Nigerian women (FOS & IRD Macro 1992; NPC, 2000; NPC & ORC Macro, 2004; NPC & ICF Macro, 2009) while contraception is still relatively low with a CPR of 15 percent in 2008 (FOS & IRD Macro 1992; NPC, 2000; NPC & ORC Macro, 2004; NPC & ICF Macro, 2009:68). Among age 15-19 married women, both knowledge and use of contraception have remained low although knowledge of any contraceptive methods increased from 32 percent

With modernisation, women's traditional economic and social statuses are expected to improve, in line with those of developed societies, empowering them to take independent life changing decisions. Thus, the socioeconomic status of women should influence sexual behaviour and knowledge and use of contraceptive methods and consequently, fertility rates. There seems to be a positive relationship between the socioeconomic status of women and sexual behaviour, particularly age at first sexual intercourse (NPC & ICF Macro, 2009), sexual activity (NPC & ICF Macro, 2009), high risk sexual intercourse (Figure 3), and use of contraceptives (Figure 4). The proportions of all the female respondents using contraception generally increased as the socioeconomic status of the households they belonged increased (NPC & ORC Macro, 2004:68; NPC & ICF Macro, 2009:71). However, the proportions of women in the poorest households using contraception declined between 2003 and 2008 (Figure 4) suggesting Nigerian poor have increasingly less contact with modernising factors or may be getting poorer and unable to access family planning commodities. These patterns might apply to the teenage women and should have significant effect on childbearing of all the women as well as the teenagers who are most likely students and less likely to be gainfully employed or have well paid jobs due to their basically lower education attainment level.



Sources: NPC & ORC Macro, 2004:68; NPC & ICF Macro, 2009:71

The contraceptive behaviour of women engaged in sexual intercourse is examined for the purpose of determining its possible fertility implication of their sexual behaviour. The NDHS, from which this paper draws its data, understandably presents information on contraceptive use by those who engaged in premarital and high risk sex since non-use of contraception results in unwanted pregnancies that often lead to unsafe abortions where it is illegal. Use of any contraceptive method among 15-49 unmarried sexually active women in Nigeria was relatively high (65 percent ever used and 50 percent current use) in 2003 while a similar pattern can be observed for teenage women age 15-19 years, in 2008 (Table 4). Besides, contraceptive use is on the increase among this category of women, The proportions of sexually active teenage unmarried women using effective modern contraceptives increased by about 26 percent for those who ever used and 14 percent for those currently using modern contraceptive methods between 1999 and 2008 (Table 4). The proportions who ever used male condom during sexual intercourse increased by about 25 percent while the proportion of current users of male condom increased by 16.5 percent between 1999 and 2008 (Table 4).

**Table:3** Percentage distribution of women age 15-19 by knowledge and use of contraception, Nigeria, 1999-2008

Method	All teen women age 15-19				Currently married age 15-19			
	1990	1999	2003	2008	1990	1999	2003	2008
<b>Knowledge</b>								
Any method	na	na	na	na	31.7	37.5	64.9	42.7
Modern method	na	na	na	na	30.5	36.3	61.6	41.6
<b>Ever used</b>								
Any method	8.3	9.2	11.2	10.5	4.4	7.2	9.2	6.9
Modern method	4.0	5.9	9.2	9.1	2.2	4.8	7.9	6.1
Condom use	1.6	3.5	6.5	7.1	0.7	1.4	3.1	3.5
<b>Currently using</b>								
Any method	5.9	6.6	6.6	6.9	1.3	4.2	4.3	3.0
Modern method	1.9	3.2	4.7	4.7	0.6	1.2	3.8	2.4
Condom use	0.4	1.8	2.6	3.8	0.4	0.2	0.3	1.2

**Sources:** FOS & IRD Macro 1992:39, 41-42; NPC, 2000:46, 49, 52; NPC & ORC Macro, 2004:64, 65, 67; NPC & ICF Macro, 2009:65, 66, 70; NA means figures are not available

In 1990 to 65 percent in 2003 only to drop by about 22 percentage points between 2003 and 2008 (Table 3). Similarly, knowledge of modern methods increased from 31 percent to 62 percent between 1990 and 2003 only to decline by about 20 percentage points between 2003 and 2008. The decline indicates fewer teenage women may have access to information on contraceptives or the teens are not willing to admit knowing the methods. In spite of this decline, the proportions of teenage married women who had knowledge of contraceptive methods in 2008 are higher than those of 1990 by about 11 percentage points indicating an increase between 1990 and 2008.

Non-use of contraception is an important contributory factor to teenage childbearing and fertility (Aboyaji et al., 2001; Hoffman & Maynard, 2008) but as already pointed out, it is still very low in sub-Saharan Africa (Aboyaji et al., 2001). A study among adolescents in a rural community in Southwest Nigeria reported negative attitude toward family planning and very low use of contraceptives (Adekanle et al., 2008). However, contraception has been increasing in Africa and, in particular, Nigeria even though the gains have been small (NPC & ICF Macro, 2009; Avong, 2013). The contraceptive prevalence among married teens fairly increased between 1990 and 1999 but remains almost the same between 1999 and 2003 although current use of modern contraceptives increased among all teen women by 1.5 percentage points and among currently married teens by 2.6 percentage points in the same period (Table 3). In contrast, all the proportions of married teen women, except for condom use, declined between 2003 and 2008.

The proportions of all teenage women who had ever used or were using contraception consistently increased ranging from 1.0-5.5 percent between 1990 and 2008. For example, the proportions of teenage women who ever used any modern method of contraception increased from 4.0 percent in 1990 to 9 percent in 2008 while condom use consistently increased for all teens from 0.4 percent in 1990 to 3.8 in 2008 and for married teens from 0.2 percent in 1999 to 1.2 in 2008 (Table 3). The general increase in contraception implies that the policy measures to influence fertility regulation among the youths by governments and other stakeholders have some effect on them and supports the modernisation perspective's claim that cultural values that impede acceptance of more effective modern contraceptives tend to give way with modernity.

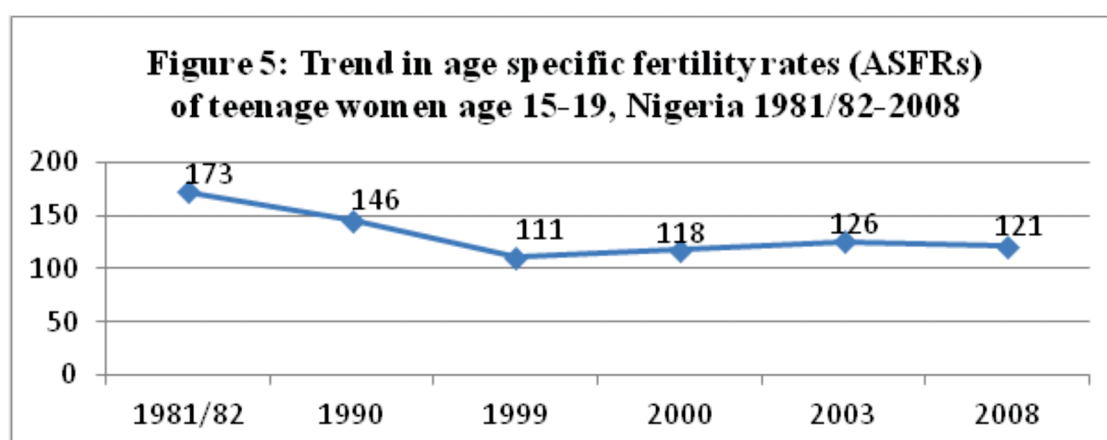
Table:4 Percentage distribution of sexually active unmarried women by use of contraceptive method, Nigeria, 1999-2008

Method	1999 (15-19)	2003 (15-49)	2008 (15-19)
Ever used			
Any	53	64.9	64.5
Modern	29.6	57.0	55.9
Condom use	21.6	45.7	46.8
Currently using			
Any	46.6	49.9	56.1
Modern	23	38.6	36.9
Condom use	15.1	23.8	31.6

Sources: NPC, 2000:49, 52; NPC & ORC Macro, 2004:65, 67; NPC & ICF Macro, 2009:66, 70

Contraception among the sexually active unmarried women is expectedly higher than among married teenage women. For example, proportions of sexually active unmarried women, age 15-19, who had used any contraceptive method at some time, were 53 percent in 1999 and 65 percent in 2008 compared to about 7 percent among the married ones in 1999 and 2008 (Tables 3 & 4). Declines in pregnancy rate and consequently childbearing in the US have been attributed to “improved contraceptive use and the use of more effective contraceptive methods among sexually active teenagers” (Planned Parenthood Federation of America [PPFA], 2012:1) and to increased abstinence (Santelli Lindberg, Finer, & Singh, 2007). Thus, the greater use of contraception by the unmarried sexually active women suggests the incidence of unwanted pregnancy is curtailed thereby reducing the childbearing and fertility rates of the teens and consequently, that of the nation at large.

One of the demographic implications of negative sexual behaviour such as low age at first sexual intercourse, premarital and high risk sex and non-use or very low use of contraceptives, is high fertility which is here measured by ASFRs. The ASFRs show and help understanding of age pattern of fertility as well as reveal the contribution of each age group of women to the level of fertility observed for the nation (NPC, 1998). As already pointed out, sub-Saharan Africa has the highest level of childbearing in the world (Aboyeji et al., 2001) and Nigeria is one of the countries in the region with teenage child birth of over a 100 per a thousand births.



Sources: NPB & ISI, 1984:76; NPC, 2000: 36; NPC, 2002: 29; NPC & ORC Macro, 2004:51; NPC & ICF Macro, 2009:55

The ASFRs of these teenage women ranged from 111-173 births per thousand women (Figure 5). This fertility level is quite high compared to fertility rates ranging from 4.9-31 births per thousand teenage women found in some developed nations between 2008 and 2011 (PPFA, 2021:3). However, the ASFRs declined sharply from 173 births per thousand women in 1981/82 (NPB & ISI, 1984:76) and 146 in 1990 (FOS & IRD/Macro, 1992:23) to 118 in 2000 only to increase by 8 children or 3 children by 2003 and 2008 respectively (Figure 5). The declining trend in childbearing among the Nigerian teenagers is also found in the US (Hamilton, Martin & Ventura 2011) and tends to be larger among ages 15-17 years than among the 18-19 year-olds (NPC & ORC Macro, 2004; NPC & ICF Macro, 2009). The decline in fertility rate for 15-19-year-olds in the US, in 2005, also concentrated entirely within age 15–17 years (Hoffman & Maynard, 2008). Thus, to further lower the fertility of the 15-19-year-olds, more attention should be paid to the 15-17-year-olds since the fertility influencing factors seem to be effective in reducing their fertility.

### **Conclusion and Recommendations**

Women worldwide are known to be sometimes reluctant to report their sexual activity (see Singh and Darroch, 1999) therefore, although the surveys have used similar definitions and questions, it is nevertheless possible they may have actually underestimated the levels of sexual intercourse of the teenagers. The study reveals age at first sexual intercourse is rising while sexual activity, premarital sex and, high-risk sexual intercourse which is exceptionally high among the sexually active never married category, are high but declining. Knowledge of methods of family planning is declining while the use of condoms and other contraceptives is low but on the increase. An increase in or sustained level of knowledge of contraceptives is needed to further raise contraceptive prevalence rate among the teenagers. The low age at first sexual intercourse, low use of contraceptives and high-risk sex especially among the never married sexually active women might be accounting for the high ASFRs among the teenage women.

The positive association between socioeconomic status and age at first sexual intercourse, high-risk sex and use of contraceptives reveals the possible impact of modernisation factors might have on the sexual behaviour of the teenagers in Nigeria. It also indicates that national development that empowers households economically is crucial for ensuring acceptable sexual behaviour of the teenage women. As a general policy implication, low age at first sexual intercourse, high prevalence of premarital sex, high sexual activity, large proportions of high risk sex with low levels of contraception or condom use, expose the Nigerian teenage women to risk of unintended pregnancy and illegal abortion, high maternal and infant mortality, STIs including HIV and high fertility rate and its consequences such as rapid population growth rate.

It is rational to recommend information about sexuality and contraceptive methods be made more available to improve responsible sexual behaviour and contraception among the adolescent population. However this may not solve the problem of early childbearing among teens since in the US, where sex education offered at school and the home is well established, most teenage mothers considered it inadequate (Wiggins, Rosato, Austerberry, Sawtell & Oliver, 2007:2). In Nigeria, sex or family life education seems to be resisted, especially in the North, for religious reasons. With over 80 percent male and female respondents approving of abstinence before marriage (NPC & ICF Macro, 2009:210), a way around the above problem may be, in addition to other strategies already being implemented, the 8-point abstinence education (see National Conference of State Legislatures [NCSL], 2012; Wiggins et al., 2007; Solomon-Fears, 2013:14) needs to be considered for adoption. This is most likely to be better accepted in the North, also for religious reasons. In other words, other strategies that discourage premarital and high risk sex and early marriage among the teens should be adopted and tailored to our cultural values, if teenage



fertility is to be reduced to the minimum and the spread of STIs and, in particular, HIV/AIDS pandemic countered in Nigeria.

All efforts by governments and other stakeholders, to raise the age at first marriage to 18, in order to increase the age at initiation of sexual intercourse and reduce the fertility level of the teenagers, seems to be yielding insignificant results nationally. There is the need to employ all acceptable research approaches that would help reveal both overt and covert factors responsible for this seeming failure of fertility reduction policies, programmes and strategies, especially in Northern Nigeria, where teenage childbearing and fertility rates are much higher (FOS & IRD Macro, 1992; NPC, 2000; NPC & ORC Macro, 2004; NPC & ICF Macro, 2009).

Whole hearted implementation of development programmes for economic development of households, an outcome of modernisation, is crucial in the face of fast changing morality resulting from the impact of electronic communications and the mass media, if healthy sexual behaviour and fertility declines are to be achieved among the Nigerian teenagers.

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