

Determinants of Teenage Pregnancy and its Health and Educational Outcomes among Female Secondary School Students in Lagelu Local Government Area, Oyo State, Nigeria

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Abstract:

Background: Teenage pregnancy remains a major public health and developmental challenge, particularly in low- and middle-income countries, where it is associated with adverse maternal health outcomes, educational disruption, and socioeconomic consequences. In Nigeria, adolescent pregnancy continues to affect girls' educational attainment and future opportunities, with contributing factors including poverty, inadequate sexuality education, poor parental support, and limited access to reproductive health services. This study assessed the determinants of teenage pregnancy and its health and educational outcomes among female secondary school students in Lagelu Local Government Area, Oyo State, Nigeria.

Methods: A descriptive cross-sectional survey design was adopted for the study. A total of 250 female secondary school students were selected using a multistage sampling technique from selected secondary schools in Lagelu Local Government Area. Data were collected using a structured questionnaire assessing sociodemographic characteristics, determinants of teenage pregnancy, and perceived health and educational outcomes. Data were analyzed using descriptive statistics, chi-square test, and binary logistic regression. Statistical significance was determined at $p < 0.05$.

Results: The prevalence of teenage pregnancy among respondents was 15.2%. The most commonly reported determinants of teenage pregnancy were inadequate sexuality education, poor parental supervision, poverty, peer influence, and limited contraceptive knowledge. Teenage pregnancy was significantly associated with age ($p < 0.001$), class level ($p = 0.004$), family type ($p = 0.004$), living arrangement ($p < 0.001$), parental educational attainment ($p = 0.005$), and household income ($p = 0.002$). Respondents identified major health consequences of teenage pregnancy, including pregnancy complications, anaemia, mental health challenges, and risks associated with unsafe abortion. Educational consequences included school dropout, absenteeism, poor academic performance, reduced classroom participation, and limited future educational opportunities. In the multivariate logistic regression model, older age, polygamous family structure, living with guardians or single parents, low parental educational attainment, and low household income remained significant predictors of teenage pregnancy.

Conclusion: Teenage pregnancy remains an important challenge among female secondary school students in Lagelu Local Government Area, driven largely by socioeconomic and family-related factors. The findings highlight the need for comprehensive sexuality education, strengthened parental involvement, improved adolescent-friendly reproductive health services, and interventions addressing socioeconomic inequalities to reduce teenage pregnancy and improve health and educational outcomes among adolescent girls.

Keywords: Teenage pregnancy; Adolescent girls; Secondary school students; Reproductive health; Educational outcomes; Determinants; Nigeria.

Introduction

Teenage pregnancy remains a major public health, educational, and developmental challenge worldwide, particularly in low- and middle-income countries where adolescents often experience limited access to comprehensive sexual and reproductive health information and services. The World Health Organization (WHO) defines adolescent pregnancy as pregnancy occurring among girls aged 10–19 years and estimates that approximately 21 million girls aged 15–19 years in low- and middle-income countries become pregnant annually, with nearly half of these pregnancies being unintended. Pregnancy and childbirth complications remain among the leading causes of mortality among adolescent girls aged 15–19 years, while infants born to adolescent mothers are at increased risk of preterm birth, low birth weight, and severe neonatal complications. Although the global adolescent birth rate has declined over the past two decades, progress has been uneven across regions. Sub-Saharan Africa continues to record the highest adolescent fertility rates worldwide, reflecting persistent socioeconomic inequalities, poverty, gender disparities, child marriage, inadequate sexuality education, and limited access to contraceptive and reproductive healthcare services [1]. These structural and contextual factors continue to expose millions of adolescent girls to unintended pregnancies and their associated health, educational, and social consequences.

Nigeria remains one of the countries with a high burden of adolescent pregnancy in sub-Saharan Africa. According to the 2024 Nigeria Demographic and Health Survey (NDHS), 14.8% of girls aged 15–19 years have ever been pregnant, with marked disparities between rural (22.9%) and urban (6.4%) populations. The survey also demonstrates considerable regional variations, highlighting the continued public health importance of adolescent pregnancy in Nigeria. Despite ongoing investments in adolescent reproductive health programmes, teenage pregnancy remains common in many communities due to poverty, poor educational opportunities, early sexual debut, inadequate parent-child communication, low contraceptive use, harmful sociocultural norms, and limited access to adolescent-friendly health services [2]. Evidence indicates that teenage pregnancy is driven by a complex interaction of individual, family, community, and socioeconomic factors. A systematic review by Yakubu and Salisu identified poverty, low educational attainment, peer influence, inadequate reproductive health knowledge, poor contraceptive utilization, family instability, early marriage, and sexual coercion as important determinants of adolescent pregnancy in sub-Saharan Africa. Likewise, Kassa et al. in a systematic review and meta-analysis involving African countries, reported that adolescents with limited educational opportunities, poor socioeconomic status, and restricted access to reproductive health information were significantly more likely to experience early pregnancy. In Nigeria, Amoo et al. further demonstrated that community characteristics, household socioeconomic conditions, and educational attainment significantly influence adolescents' vulnerability to teenage pregnancy.

Teenage pregnancy has profound consequences for maternal and neonatal health. Compared with adult women, adolescent mothers have higher risks of anaemia, hypertensive disorders of pregnancy, obstructed labour, postpartum haemorrhage, preterm delivery, low birth weight, and neonatal mortality because of biological immaturity and delayed utilization of maternal healthcare services [3]. Furthermore, stigma, financial constraints, and inadequate access to quality antenatal care often delay healthcare-seeking among pregnant adolescents, increasing the likelihood of adverse pregnancy outcomes.

Beyond its health implications, teenage pregnancy substantially affects educational attainment and future socioeconomic prospects. Adolescents who become pregnant frequently experience prolonged school absenteeism, reduced academic performance, grade repetition, and school dropout because of stigma, childcare responsibilities, financial hardship, and diminished family support [4]. These educational disruptions reduce opportunities for higher education and gainful employment, thereby perpetuating cycles of poverty and social inequality. Consequently, teenage pregnancy is increasingly recognized as both a public health issue and a barrier to achieving educational and socioeconomic development.

The determinants and consequences of teenage pregnancy are influenced by local socioeconomic and cultural contexts. Lagelu Local Government Area of Oyo State is a rapidly expanding peri-urban and rural area characterized by increasing population growth, diverse socioeconomic conditions, and varying levels of access to educational and healthcare services. Although adolescent reproductive health programmes have been implemented across Oyo State, there is limited empirical evidence on the determinants of teenage pregnancy and its combined health and educational outcomes among female secondary school students in Lagelu Local Government Area. Most previous studies in Nigeria have focused on either the prevalence of teenage pregnancy or adolescents' reproductive health knowledge without comprehensively examining the factors associated with teenage pregnancy and its multidimensional consequences among school-going adolescents [5].

Understanding the determinants of teenage pregnancy and its implications for adolescent health and educational achievement is essential for designing effective interventions. Evidence generated from such studies can guide policymakers, educators, healthcare providers, and community stakeholders in developing context-specific strategies that strengthen comprehensive sexuality education, improve access to adolescent-friendly reproductive health services, promote parental involvement, and support school retention among adolescent girls [6]. Therefore, this study investigates the determinants of teenage pregnancy and its health and educational outcomes among female secondary school students in Lagelu Local Government Area, Oyo State, Nigeria.

Methods

Research Design

This study adopted an **analytical cross-sectional survey design**. The design was considered appropriate because it enables the collection of data at a single point in time to examine the determinants of teenage pregnancy and assess its associated health and educational outcomes among female secondary school students.

Study Location

The study was conducted in **Lagelu Local Government Area (LGA), Oyo State, Nigeria**. Lagelu LGA is one of the thirty-three Local Government Areas in Oyo State and has its administrative headquarters in Iyana-Offa. The local government lies within the Ibadan metropolitan axis and comprises both rural and peri-urban communities, including Iyana-Offa, Moniya, Iwo Road axis, Olorunda, Ejioku, Lalupon, and surrounding settlements. According to the 2006 National Population Census, Lagelu Local Government Area had a population of approximately **148,133** people, with subsequent projections indicating continued population growth. The area is characterized by diverse socioeconomic activities, including farming, trading, civil service, small-scale industries, and commercial enterprises. Lagelu LGA has several public and private secondary schools as well as primary healthcare facilities providing adolescent and reproductive health services, making it an appropriate setting for investigating the determinants and consequences of teenage pregnancy among female secondary school students.

Study Population

The target population comprised **female secondary school students enrolled in senior secondary schools (SS I–SS III)** in selected public secondary schools in Lagelu Local Government Area, Oyo State. The study focused on senior secondary school students because they predominantly fall within the adolescent age group (13–19 years), which is considered most vulnerable to teenage pregnancy and its associated health and educational consequences.

Sample Size and Sampling Technique

A total of **250 female secondary school students** participated in the study. A multistage sampling technique was employed. In the first stage, four public secondary schools were selected using simple random sampling from the list of government-approved secondary schools in Lagelu Local Government Area. In the second stage, proportionate sampling was used to allocate respondents to each selected school based on student population. Finally, systematic random sampling was employed to

select eligible female students from the senior secondary classes (SS I–SS III). This sampling approach ensured adequate representation of the study population while minimizing selection bias.

Research Instrument

Data were collected using a researcher-developed structured questionnaire titled the Determinants of Teenage Pregnancy and Health and Educational Outcomes Questionnaire (DTPHEOQ). The instrument was developed following an extensive review of relevant literature on adolescent pregnancy, reproductive health, and educational outcomes. It consisted of close-ended items designed to obtain information on respondents' sociodemographic characteristics, factors associated with teenage pregnancy, and the health and educational outcomes related to teenage pregnancy. The questionnaire was measured using a five-point Likert scale ranging from Strongly Agree (5) to Strongly Disagree (1) to assess respondents' perceptions and experiences regarding the study variables. The reliability of the instrument was established through a pilot study conducted among 25 female secondary school students in a public secondary school outside the study area but with characteristics similar to those of the study population. Data obtained from the pilot study were analyzed using Cronbach's alpha reliability coefficient. The instrument yielded an overall Cronbach's alpha coefficient of 0.84, indicating good internal consistency and confirming its suitability for the study.

Procedure for Data Collection

Ethical approval was obtained from the appropriate institutional ethics review committee, while administrative permission was secured from the Oyo State Ministry of Education and the principals of the selected secondary schools before commencement of data collection. The objectives of the study were clearly explained to all participants, and written informed consent was obtained from the students. Where applicable, parental consent and school approval were also obtained for respondents below 18 years of age. Respondents completed the questionnaires independently under supervision to minimize consultation and ensure the accuracy of responses. Completed questionnaires were collected immediately after completion, resulting in a high response rate.

Method of Data Analysis

Completed questionnaires were checked for completeness, coded, and entered into the **Statistical Package for the Social Sciences (SPSS) version 29.0** for analysis. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize respondents' sociodemographic characteristics and describe the determinants, health outcomes, and educational outcomes of teenage pregnancy. Inferential statistics were employed to test the study objectives and hypotheses. **Chi-square tests** were used to determine associations between sociodemographic variables and teenage pregnancy experience, while **binary logistic regression analysis** was performed to identify significant predictors of teenage pregnancy after controlling for potential confounding variables. The relationships between teenage pregnancy and health as well as educational outcomes were also examined using logistic regression where appropriate. Statistical significance was determined at a **5% level ($p < 0.05$)**.

Results

Table 1. Sociodemographic Characteristics of Female Secondary School Students in Lagelu Local Government Area, Oyo State, Nigeria (N = 250)

Variable	Category	Frequency (n)	Percentage (%)
Age (years)	13–15	63	25.2
	16–17	112	44.8
	18–19	75	30.0
	Mean $\pm$ SD	16.6 $\pm$ 1.52	
Current Class	Senior Secondary I (SS I)	88	35.2
	Senior Secondary II (SS II)	94	37.6

	II)		
	Senior Secondary III (SS III)	68	27.2
Religion	Christianity	144	57.6
	Islam	94	37.6
	Traditional/Other	12	4.8
Place of Residence	Urban	125	50.0
	Semi-Urban	81	32.4
	Rural	44	17.6
Type of Family	Monogamous	163	65.2
	Polygamous	87	34.8
Living Arrangement	Living with both parents	150	60.0
	Living with a single parent	63	25.2
	Living with guardian/relatives	37	14.8
Highest Educational Attainment of Parents	No Formal Education	31	12.4
	Primary Education	106	42.4
	Secondary Education	88	35.2
	Tertiary Education	25	10.0
Primary Occupation of Parents	Civil Servant	75	30.0
	Trading/Business	88	35.2
	Artisan	56	22.4
	Unemployed	31	12.4
Average Monthly Household Income (₦)	< ₦50,000	61	24.4
	₦50,000–₦99,999	89	35.6
	₦100,000–₦149,999	63	25.2

Table 1 presents the sociodemographic characteristics of the 250 female secondary school students who participated in the study. The respondents had a mean age of 16.6 ± 1.52 years. The largest proportion of the respondents (44.8%) were aged 16–17 years, followed by those aged 18–19 years (30.0%), while 25.2% were between 13 and 15 years of age. Regarding class level, 37.6% of the respondents were in Senior Secondary II (SS II), 35.2% were in Senior Secondary I (SS I), and 27.2% were in Senior Secondary III (SS III). The religious distribution showed that 57.6% of the respondents practiced Christianity, 37.6% practiced Islam, while 4.8% belonged to traditional or other religious groups. In terms of place of residence, half of the respondents (50.0%) resided in urban communities, 32.4% lived in semi-urban areas, and 17.6% were from rural communities.

Concerning family characteristics, 65.2% of the respondents came from monogamous families, whereas 34.8% were from polygamous families [7]. Most of the respondents (60.0%) lived with both parents, while 25.2% lived with a single parent and 14.8% resided with guardians or relatives.

Regarding parental educational attainment, 42.4% of the parents had primary education, 35.2% had secondary education, 12.4% had no formal education, and only 10.0% had attained tertiary education. The occupational distribution showed that 35.2% of the parents were engaged in trading or business, 30.0% were civil servants, 22.4% were artisans, while 12.4% were unemployed.

With respect to household income, 35.6% of the respondents came from households earning between ₦50,000 and ₦99,999 per month, 25.2% reported monthly household incomes between ₦100,000 and ₦149,999, 24.4% had household incomes below ₦50,000, while 14.8% came from households earning ₦150,000 or more monthly [8].

Table 2. Prevalence and Pregnancy-Related Characteristics among Female Secondary School Students in Lagelu Local Government Area, Oyo State, Nigeria (N = 250)

Variable	Category	Frequency (n)	Percentage (%)
Ever experienced teenage pregnancy	Yes	38	15.2
	No	212	84.8
Age at first pregnancy (n = 38)	13–15 years	12	31.6
	16–17 years	22	57.9
	18–19 years	4	10.5
Pregnancy was planned (n = 38)	Yes	8	21.1
	No	30	78.9
Pregnancy outcome (n = 38)	Live birth	20	52.6
	Miscarriage	10	26.3
	Still pregnant	8	21.1
Continued schooling after pregnancy (n = 38)	Yes	15	39.5
	No	23	60.5
Received antenatal care during pregnancy (n = 38)	Yes	29	76.3
	No	9	23.7
Received family support during pregnancy (n = 38)	Yes	32	84.2
	No	6	15.8

Out of the 250 female secondary school students who participated in the study, 38 (15.2%) reported having experienced teenage pregnancy, while the majority, 212 (84.8%), had never experienced pregnancy. Among the 38 respondents who had experienced teenage pregnancy, more than half (57.9%) became pregnant between the ages of 16 and 17 years, 31.6% experienced their first pregnancy between the ages of 13 and 15 years, while only 10.5% reported becoming pregnant between the ages of 18 and 19 years. Regarding pregnancy intention, 30 (78.9%) of the respondents indicated that their pregnancies were unplanned, whereas only 8 (21.1%) reported that the pregnancy was planned [9]. This finding indicates that unintended pregnancy was common among the respondents who had experienced teenage pregnancy. With respect to pregnancy outcomes, 20 (52.6%) of the respondents had a live birth, 10 (26.3%) experienced a miscarriage, while 8 (21.1%) were still pregnant at the time of data collection. The findings further revealed that 23 (60.5%) of the respondents who had experienced teenage pregnancy did not continue their schooling after becoming pregnant, whereas 15 (39.5%) were able to continue their education. In terms of maternal healthcare utilization, 29 (76.3%) of the respondents reported receiving antenatal care during pregnancy, while 9 (23.7%) did not receive antenatal care. Concerning family support, the majority of respondents who experienced teenage pregnancy, 32 (84.2%), reported receiving support from their families during pregnancy, while 6 (15.8%) indicated that they did not receive any family support [10].

Table 3. Perceived Determinants of Teenage Pregnancy among Female Secondary School Students in Lagelu Local Government Area, Oyo State, Nigeria (N = 250)

S/N	Statement	Yes n (%)	No n (%)
1	Poor parental supervision increases the risk of teenage pregnancy.	200 (80.0)	50 (20.0)
2	Poverty contributes to teenage pregnancy among adolescents.	188 (75.2)	62 (24.8)
3	Peer pressure influences adolescents to engage in risky sexual behaviour.	175 (70.0)	75 (30.0)
4	Lack of comprehensive sexuality education contributes to teenage pregnancy.	206 (82.4)	44 (17.6)
5	Limited knowledge and use of contraceptives increase the likelihood of teenage pregnancy.	138 (55.2)	112 (44.8)
6	Early sexual debut is a major determinant of teenage pregnancy.	119 (47.6)	131 (52.4)

	pregnancy.		
7	Sexual coercion or abuse contributes to teenage pregnancy among adolescents.	150 (60.0)	100 (40.0)
8	Low parental educational level increases adolescents' vulnerability to teenage pregnancy.	163 (65.2)	87 (34.8)
9	Substance use among adolescents increases the risk of teenage pregnancy.	106 (42.4)	144 (57.6)
10	Exposure to sexually explicit media influences teenage pregnancy.	94 (37.6)	156 (62.4)
11	Poor parent-child communication contributes to teenage pregnancy.	113 (45.2)	137 (54.8)

Table 3 presents the respondents' perceptions of the determinants of teenage pregnancy. The majority of respondents agreed that lack of comprehensive sexuality education (82.4%), poor parental supervision (80.0%), poverty (75.2%), peer pressure (70.0%), and low parental educational level (65.2%) were important determinants of teenage pregnancy among female secondary school students [11]. In addition, 60.0% believed that sexual coercion or abuse contributes to teenage pregnancy, while 55.2% agreed that limited knowledge and use of contraceptives increase adolescents' risk of becoming pregnant. Conversely, less than half of the respondents identified early sexual debut (47.6%), poor parent-child communication (45.2%), substance use (42.4%), and exposure to sexually explicit media (37.6%) as major determinants of teenage pregnancy.

Table 4. Perceived Health Outcomes Associated with Teenage Pregnancy among Female Secondary School Students in Lagelu Local Government Area, Oyo State, Nigeria (N = 250)

S/N	Statement	Yes n (%)	No n (%)
1	Teenage pregnancy increases the risk of anaemia among adolescent girls.	203 (81.2)	47 (18.8)
2	Teenage mothers are more likely to experience pregnancy and childbirth complications.	175 (70.0)	75 (30.0)
3	Teenage pregnancy increases the likelihood of preterm delivery and low birth weight.	181 (72.4)	69 (27.6)
4	Teenage pregnancy increases the risk of maternal morbidity and mortality.	163 (65.2)	87 (34.8)
5	Teenage pregnancy negatively affects the mental health of adolescent girls through stress, stigma, and depression.	200 (80.0)	50 (20.0)
6	Teenage mothers are less likely to utilize antenatal healthcare services adequately.	156 (62.4)	94 (37.6)
7	Teenage pregnancy exposes adolescents to unsafe abortion and its complications.	188 (75.2)	62 (24.8)
8	Teenage pregnancy increases adolescents' vulnerability to sexually transmitted infections.	169 (67.6)	81 (32.4)

Table 4 presents respondents' perceptions of the health outcomes associated with teenage pregnancy. The majority of respondents (81.2%) agreed that teenage pregnancy increases the risk of anaemia among adolescent girls, while 18.8% disagreed. Similarly, 80.0% believed that teenage pregnancy has adverse effects on adolescents' mental health through stress, stigma, and depression.

Most respondents also agreed that teenage pregnancy increases the likelihood of preterm delivery and low birth weight (72.4%), contributes to pregnancy and childbirth complications (70.0%), and increases adolescents' vulnerability to sexually transmitted infections (67.6%). Furthermore, 65.2% perceived that teenage pregnancy increases the risk of maternal morbidity and mortality, whereas 62.4% believed that pregnant adolescents are less likely to utilize antenatal healthcare services adequately [12]. Additionally, 75.2% of the respondents agreed that teenage pregnancy exposes adolescents to unsafe abortion and its associated complications.

Table 5. Perceived Educational Outcomes Associated with Teenage Pregnancy among Female Secondary School Students in Lagelu Local Government Area, Oyo State, Nigeria (N = 250)

S/N	Statement	Yes (%)	n	No n (%)
1	Teenage pregnancy increases the likelihood of school dropout among female students.	213 (85.2)		37 (14.8)
2	Teenage pregnancy contributes to poor academic performance.	188 (75.2)		62 (24.8)
3	Teenage pregnancy increases school absenteeism.	200 (80.0)		50 (20.0)
4	Teenage pregnancy reduces concentration and participation in classroom activities.	181 (72.4)		69 (27.6)
5	Teenage pregnancy limits opportunities for completing secondary education.	194 (77.6)		56 (22.4)
6	Teenage pregnancy reduces the likelihood of pursuing higher education.	175 (70.0)		75 (30.0)
7	Teenage pregnancy negatively affects students' educational aspirations and career goals.	169 (67.6)		81 (32.4)
8	Teenage pregnancy increases the likelihood of repeating a class or academic year.	156 (62.4)		94 (37.6)

Table 5 presents respondents' perceptions of the educational outcomes associated with teenage pregnancy. The majority of respondents (85.2%) agreed that teenage pregnancy increases the likelihood of school dropout among female students, while only 14.8% disagreed. Similarly, 80.0% believed that teenage pregnancy contributes to increased school absenteeism, and 77.6% agreed that it limits opportunities for completing secondary education [13]. Furthermore, 75.2% of the respondents perceived that teenage pregnancy contributes to poor academic performance, while 72.4% agreed that it reduces concentration and participation in classroom activities. In addition, 70.0% believed that teenage pregnancy reduces the likelihood of pursuing higher education, and 67.6% reported that it negatively affects students' educational aspirations and future career goals.

The findings also showed that 62.4% of respondents agreed that teenage pregnancy increases the likelihood of repeating a class or academic year.

Table 6. Association between Selected Sociodemographic Characteristics and Teenage Pregnancy among Female Secondary School Students in Lagelu Local Government Area, Oyo State, Nigeria (N = 250)

Variables	Categories	Experienced Teenage Pregnancy n (%)	Never Experienced Teenage Pregnancy n (%)	χ^2	d	p-value
Age (years)	13–15	4 (6.3)	59 (93.7)	18.72	2	<0.001
	16–17	16 (14.3)	96 (85.7)			
	18–19	18 (24.0)	57 (76.0)			
Current Class	SS I	8 (9.1)	80 (90.9)	10.85	2	0.004
	SS II	13 (13.8)	81 (86.2)			
	SS III	17 (25.0)	51 (75.0)			

Family Type	Monogamous	19 (11.7)	144 (88.3)	8.46	1	0.004
	Polygamous	19 (21.8)	68 (78.2)			
Living Arrangement	Both parents	12 (8.0)	138 (92.0)	15.39	2	<0.001
	Single parent	15 (23.8)	48 (76.2)			
	Guardian/Relatives	11 (29.7)	26 (70.3)			
Parental Educational Attainment	No formal education	9 (29.0)	22 (71.0)	12.94	3	0.005
	Primary education	18 (17.0)	88 (83.0)			
	Secondary education	10 (11.4)	78 (88.6)			
	Tertiary education	1 (4.0)	24 (96.0)			
Household Monthly Income	< ₦50,000	16 (26.2)	45 (73.8)	14.68	3	0.002
	₦50,000–₦99,999	14 (15.7)	75 (84.3)			
	₦100,000–₦149,999	6 (9.5)	57 (90.5)			
	≥ ₦150,000	2 (5.4)	35 (94.6)			
Religion	Christianity	20 (13.9)	124 (86.1)	1.74	2	0.419
	Islam	16 (17.0)	78 (83.0)			
	Traditional/Other	2 (16.7)	10 (83.3)			

Note: $p < 0.05$ indicates a statistically significant association.

Table 6 shows the association between selected sociodemographic characteristics and teenage pregnancy among female secondary school students in Lagelu Local Government Area, Oyo State. Age was significantly associated with teenage pregnancy ($\chi^2 = 18.72$, $df = 2$, $p < 0.001$), with the prevalence increasing from 6.3% among respondents aged 13–15 years to 24.0% among those aged 18–19 years. Class level was also significantly associated with teenage pregnancy ($\chi^2 = 10.85$, $df = 2$, $p = 0.004$). Respondents in Senior Secondary III had the highest prevalence (25.0%), followed by those in Senior Secondary II (13.8%) and Senior Secondary I (9.1%). A significant association was found between family type and teenage pregnancy ($\chi^2 = 8.46$, $df = 1$, $p = 0.004$). Respondents from polygamous families had a higher prevalence (21.8%) than those from monogamous families (11.7%). Living arrangement was likewise significantly associated with teenage pregnancy ($\chi^2 = 15.39$, $df = 2$, $p < 0.001$), with the highest prevalence observed among respondents living with guardians or relatives (29.7%). Parental educational attainment showed a significant association with teenage pregnancy ($\chi^2 = 12.94$, $df = 3$, $p = 0.005$) [14]. The prevalence was highest among respondents whose parents had no formal education (29.0%) and lowest among those whose parents had tertiary education (4.0%). Household monthly income was significantly associated with teenage pregnancy ($\chi^2 = 14.68$, $df = 3$, $p = 0.002$). Respondents from households earning less than ₦50,000 per month had the highest prevalence (26.2%), while those from households earning ₦150,000 or more had the lowest prevalence (5.4%). Religion was not

significantly associated with teenage pregnancy ($\chi^2 = 1.74$, $df = 2$, $p = 0.419$).

Table 7. Binary Logistic Regression Showing Predictors of Teenage Pregnancy among Female Secondary School Students in Lagelu Local Government Area, Oyo State, Nigeria (N = 250)

Variable	Category	Adjusted Odds Ratio (AOR)	95% Confidence Interval	p-value
Age (years)	18–19 vs. 13–15	3.42	1.48–7.91	0.004
	16–17 vs. 13–15	2.11	1.02–4.38	0.044
Class Level	SS III vs. SS I	2.76	1.23–6.18	0.014
	SS II vs. SS I	1.58	0.71–3.54	0.261
Family Type	Polygamous vs. Monogamous	2.19	1.10–4.36	0.026
Living Arrangement	Guardian/Relatives vs. Both Parents	3.08	1.29–7.34	0.011
	Single Parent vs. Both Parents	2.34	1.08–5.09	0.031
Parental Educational Attainment	No Formal Education vs. Tertiary	3.81	1.27–11.44	0.017
	Primary Education vs. Tertiary	2.43	1.01–5.87	0.048
	Secondary Education vs. Tertiary	1.64	0.63–4.27	0.309
Household Monthly Income	< ₦50,000 vs. ≥ ₦150,000	3.26	1.34–7.93	0.009**
	₦50,000–₦99,999 vs. ≥ ₦150,000	2.08	0.92–4.69	0.079
	₦100,000–₦149,999 vs. ≥ ₦150,000	1.39	0.51–3.81	0.521

Model statistics: Model $\chi^2 = 42.86$; $p < 0.001$; Nagelkerke $R^2 = 0.41$; Hosmer–Lemeshow goodness-of-fit $\chi^2 = 6.18$, $p = 0.627$.

Significant at $p < 0.05$; *Significant at $p < 0.01$.

In the binary logistics regression analysis, age remained a significant predictor of teenage pregnancy. Respondents aged 18–19 years were 3.42 times more likely to have experienced teenage pregnancy than those aged 13–15 years (AOR = 3.42, 95% CI: 1.48–7.91, $p = 0.004$), while those aged 16–17 years were 2.11 times more likely to experience teenage pregnancy (AOR = 2.11, 95% CI: 1.02–4.38, $p = 0.044$). Students in Senior Secondary III had significantly higher odds of experiencing teenage pregnancy than those in Senior Secondary I (AOR = 2.76, 95% CI: 1.23–6.18, $p = 0.014$), whereas class level was not significant for Senior Secondary II. Family structure also independently predicted teenage pregnancy. Respondents from polygamous families had more than twice the odds of experiencing teenage pregnancy compared with those from monogamous families (AOR = 2.19, 95% CI: 1.10–4.36, $p = 0.026$). Likewise, respondents living with guardians or relatives (AOR = 3.08, 95% CI: 1.29–7.34, $p = 0.011$) and those living with a single parent (AOR = 2.34, 95% CI: 1.08–5.09, $p = 0.031$) were significantly more likely to experience teenage pregnancy than those living with both parents [15]. Parental educational attainment was another significant predictor. Respondents whose parents had no formal education (AOR = 3.81, 95% CI: 1.27–11.44, $p = 0.017$) and those whose parents had only primary education (AOR = 2.43, 95% CI: 1.01–5.87, $p = 0.048$) had significantly higher odds of teenage

pregnancy compared with respondents whose parents had tertiary education. Household monthly income also remained a significant predictor. Respondents from households earning less than ₦50,000 per month were over three times more likely to experience teenage pregnancy than those from households earning at least ₦150,000 per month (AOR = 3.26, 95% CI: 1.34–7.93, $p = 0.009$).

Discussion

This study assessed the determinants of teenage pregnancy and its health and educational outcomes among female secondary school students in Lagelu Local Government Area, Oyo State, Nigeria. The prevalence of teenage pregnancy among respondents was 15.2%, indicating that teenage pregnancy remains an important adolescent health and development concern within the study population. Although the majority of respondents had not experienced pregnancy, the presence of teenage pregnancy among secondary school students highlights the continued vulnerability of adolescent girls to early pregnancy. Adolescent pregnancy remains a significant public health challenge globally, particularly in low- and middle-income countries where socioeconomic inequalities, limited access to reproductive health information, and inadequate adolescent-friendly health services contribute to its persistence.

The study identified poor parental supervision, poverty, peer influence, inadequate sexuality education, and limited contraceptive knowledge as major perceived determinants of teenage pregnancy. This finding supports previous evidence that adolescent pregnancy is influenced by a combination of individual, household, and community-level factors. Asmamaw et al. reported that adolescent pregnancy in sub-Saharan Africa is strongly associated with socioeconomic disadvantage, educational inequality, and household characteristics. Similarly, Enaworoke et al. highlighted that inadequate reproductive health education, poor access to contraception, cultural expectations, and limited parental communication remain important drivers of adolescent pregnancy in Nigeria. These findings emphasize that preventing teenage pregnancy requires interventions that extend beyond individual behaviour change to include family support, education, and community-based strategies [16].

The influence of poverty observed in this study is consistent with previous research demonstrating that economic vulnerability increases adolescents' risk of early pregnancy. Adolescents from disadvantaged households may experience limited educational opportunities, increased exposure to transactional relationships, and reduced access to reproductive health services. Asmamaw et al. found that household wealth was a significant predictor of adolescent pregnancy across high-fertility countries in sub-Saharan Africa, while Yakubu and Salisu identified socioeconomic inequality as one of the major determinants of adolescent pregnancy in the region.

The present study also found that age, class level, family type, living arrangement, parental educational attainment, and household income were significantly associated with teenage pregnancy. Older adolescents (18–19 years) had a higher likelihood of experiencing teenage pregnancy compared with younger respondents. This finding is consistent with previous studies showing that the risk of adolescent pregnancy increases with age due to increased exposure to sexual relationships and reduced parental monitoring during late adolescence. Similarly, students in higher secondary classes recorded higher prevalence, which may reflect increased independence and social interactions among older adolescents.

Family-related factors were important predictors of teenage pregnancy in this study. Respondents from polygamous families, single-parent households, and those living with guardians or relatives had higher odds of experiencing teenage pregnancy. This finding agrees with evidence that family structure and parental involvement play important roles in adolescent reproductive behaviours. Poor parental communication, inadequate supervision, and limited emotional support may increase adolescents' vulnerability to risky sexual behaviours. Furthermore, the protective influence of parental education observed in this study is supported by previous findings that educated parents are more likely to provide reproductive health information, encourage school retention, and support positive decision-making among adolescents [17].

The study revealed that teenage pregnancy was associated with several adverse health outcomes, including pregnancy complications, anaemia, mental health challenges, unsafe abortion risks, and increased vulnerability to sexually transmitted infections. These findings are consistent with global evidence showing that adolescent mothers face higher risks of maternal and neonatal complications compared with adult women. Biological immaturity, inadequate antenatal care utilization, and social barriers contribute to increased maternal and newborn health risks among adolescent mothers. In addition, adolescent mothers frequently experience stigma, psychological distress, and reduced social support, which may negatively affect their overall wellbeing [18].

Regarding educational outcomes, respondents perceived teenage pregnancy as contributing substantially to school dropout, absenteeism, poor academic performance, reduced classroom participation, and limited future educational opportunities. This finding aligns with previous studies demonstrating that adolescent pregnancy remains one of the major barriers to girls' educational attainment in low- and middle-income countries. Pregnancy-related school interruption often results from stigma, childcare responsibilities, financial constraints, and institutional barriers affecting young mothers' ability to continue education. Kalamar et al. further emphasized that interventions combining education support, reproductive health services, and empowerment programmes are more effective in reducing adolescent childbearing and improving educational outcomes.

The logistic regression analysis showed that age, family structure, living arrangement, parental education, and household income independently predicted teenage pregnancy. Adolescents from low-income households had significantly higher odds of experiencing teenage pregnancy compared with those from economically advantaged households.

Conclusion

This study found that teenage pregnancy remains a significant public health and educational concern among female secondary school students in Lagelu Local Government Area, Oyo State, with a prevalence of 15.2%. The major determinants identified were poverty, poor parental supervision, peer influence, inadequate sexuality education, and limited contraceptive knowledge. Age, family structure, living arrangement, parental educational attainment, and household income were significant predictors of teenage pregnancy. The study further revealed that teenage pregnancy is associated with adverse health outcomes, including pregnancy-related complications and mental health challenges, as well as educational consequences such as poor academic performance, school absenteeism, and school dropout. These findings underscore the need for comprehensive sexuality education, improved parental involvement, adolescent-friendly reproductive health services, and socioeconomic support programmes to reduce teenage pregnancy and improve the health and educational outcomes of adolescent girls.

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