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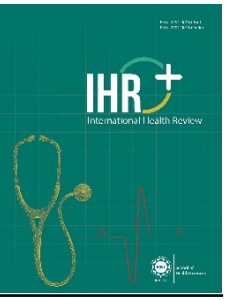

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Psychosocial Effects of Teenage Pregnancy on School-attending Female Adolescents in Ilorin, Kwara State, Nigeria

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ABSTRACT

Teenage pregnancy remains a critical public health and educational concern in Sub-Saharan Africa. This descriptive survey study examined the psychosocial effects of teenage pregnancy on school-going adolescents in Ilorin, Kwara State, Nigeria. A multi-stage sampling procedure was employed to select 438 female secondary school students between the ages of 18 and 19 from 15 sampled schools across Ilorin. Data was gathered using a validated questionnaire, and Chi-square analysis and descriptive statistics were utilized at a significance level of 0.05. The results revealed that teenage pregnancy is significantly associated with elevated stress and anxiety ($\chi^2 = 29.52$, $p < 0.05$), depression ($\chi^2 = 35.33$, $p < 0.05$), diminished self-esteem ($\chi^2 = 27.15$, $p < 0.05$), and declining academic performance ($\chi^2 = 63.39$, $p < 0.05$). The results showed how urgently comprehensive school-based psychological support programs and policy initiatives that are specifically designed to address the particular difficulties experienced by adolescent moms in Nigerian secondary schools are needed.

Keywords: academic performance, adolescent mothers, Nigeria, psychosocial effects, self-esteem, teenage pregnancy

1. INTRODUCTION

Adolescent pregnancy is a major global public health issue [1], with Sub-Saharan Africa having some of the highest prevalence rates. Inadequate education and restricted access to healthcare services are two of the many issues that affect it. For instance, studies show that Nigeria exhibits a high incidence of adolescent pregnancies, which are exacerbated by firmly established social conventions and a lack of awareness regarding fertility [2]. In general terms, teenage pregnancy can be defined as a process where a young girl aged 20 or below encounters pregnancy and childbearing-and undergoes all of these stages while still being in one of her most socially (and physically) developing years of adolescence [3].

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Teenage pregnancy has far-reaching consequences that extend beyond physical health. Numerous psychological and social issues, including depression, elevated stress, anxiety, low self-esteem, social disengagement, and stigma from their communities, are common among young mothers. Interruptions in their education and challenges in interpersonal connections can exacerbate these issues [4]. When taken as a whole, these elements have the potential to seriously harm their mental and general well-being as well as future prospects.

The health of the mother and the unborn child is significantly impacted by psychological disturbances during pregnancy, especially stress and worry [5]. Adolescents, who are still going through critical phases of emotional and psychological development, frequently face severe emotional difficulties [6]. Teenage girls are more likely to experience severe social and psychological difficulties than young mothers. These include unfavorable responses from their communities, a lack of social and financial support, as well as interruptions to their schooling [7].

Studies have consistently shown that teenage mothers are more vulnerable to perinatal depression compared to older mothers. This condition is often triggered by factors, such as unplanned pregnancies, lack of family support or rejection, and worries about the future [8]. When stress, anxiety, and depression occur together, they can seriously affect the health and well-being of the mother and may also lead towards negative pregnancy outcomes. These outcomes may include premature birth, low birth weight, and difficulties in forming a strong emotional bond between the mother and her baby. Research conducted in Nigeria and other parts of Sub-Saharan Africa also indicates that depression among adolescent mothers can influence children's development through various biological, social, and caregiving factors [9].

One of the most significant psychosocial effects of teenage pregnancy is the reduction of self-esteem among young mothers. Experiencing a decline in self-worth during a crucial stage of identity development may make adolescents more vulnerable to engaging in risky behaviors and experiencing repeated pregnancies [10]. The combined physical, emotional, and psychological pressures of early motherhood can be overwhelming. In addition, the stigma often associated with adolescent pregnancy and the sudden responsibility of caring for a child may lead to feelings of inadequacy and reduced self-confidence [11]. Studies also suggest that

teenage mothers who experience severe emotional distress may respond through behaviors, such as social withdrawal, feelings of inferiority, or increased aggression as coping mechanisms [12]. These responses could hinder their personal growth and make it more difficult for them to build healthy relationships or pursue future goals [13].

In Nigeria, teenage pregnancy often leads towards serious interruptions in the education of young girls.Due to pregnancy and the obligations of raising a child, many teenagers are compelled to drop out of school [14]. Unfortunately, the nation's educational system and societal views offer little assistance that would enable young mothers to complete their education, which raises the high school dropout rate [15]. Career prospects, financial independence, and young women's capacity to actively engage in society can all be negatively impacted by such educational disruptions. Additionally, many girls are deterred from going back to school by the societal stigma attached to teenage pregnancy. This is because they may worry about being embarrassed, being rejected by their peers, or receiving unfavorable treatment from their teachers. Adolescent pregnancy is one of the main causes of female students quitting school, according to research conducted in Nigeria.

Teenage pregnancy can damage support networks and family ties in addition to having an impact on education. Unplanned pregnancies frequently lead to confrontation between the adolescent and her guardians or parents. Families may respond with rage, disappointment, or embarrassment, which may result in less emotional support or even rejection. Teenagers who get pregnant may become even more alone and emotionally vulnerable as a result of this collapse in family support during an already trying time in their lives.

The prevalence and health effects of adolescent pregnancy in Nigeria have been extensively researched. However, the psychological experiences of young mothers who continue their education have received less attention, especially in the setting of Ilorin culture. The emotional and social difficulties faced by adolescent mothers have received little attention in prior research, which has mostly concentrated on health and educational outcomes. The creation of comprehensive interventions that meet the educational and psychosocial needs of adolescent mothers is hampered by this knowledge gap. Therefore, the goal of this study was to examine the psychological effects of teenage pregnancy on school-age adolescents in

Ilorin, Kwara State.

2. METHODOLOGY

2.1. Research Design

For this study, a descriptive survey research design was used. Given the goal of the study, which was to systematically collect data on the psychosocial experiences of teenage moms without changing the study variables, this design was deemed adequate.

2.2. Population and Setting

Female secondary school students in Ilorin, Kwara State, between the ages of 18 and 19 constituted the target group. According to the data from the Kwara State Universal Basic Education Board, 2023, Ilorin consists of five local government areas with 171 public secondary schools and 29,779 female students enrolled altogether.

2.3. Sampling Procedure

A total of 438 respondents were chosen using a four-stage multi-stage sampling process. In stage 1, secondary schools in Ilorin were split into two groups: public and private. In Ilorin, there are 74 public and 97 private senior high schools. Each school was chosen in a methodical and representative manner owing to this stratification.

Approximately, seven public schools and ten private secondary schools were included in stage 2, which used a proportionate sampling technique to choose roughly 10% of schools from each stratum.

Table 1. Distribution of Sampled Schools by Type

Type of School	No. of Schools	10%
Private Senior Secondary Schools	97	9.7
Public Senior Secondary Schools	74	7.4
Total	171	17

In stage 3, distinct schools were chosen using a simple random selection technique. Each school's name was written on a separate sheet of paper, put in a container, and picked one follow the reverse until the necessary sample size was reached. Both the public and private school groups underwent this procedure independently. Using a proportional selection method, 7.07% students taken from each sampled school were selected for stage 4.

According to the research advisor (2006), a minimum sample size of 393 is required to produce 95% confidence interval with p value <0.05. A final sample of 438 participants was obtained by increasing the sample size by 11.5% to attain 10% attrition rate.

Convenience sampling was used in stage 5 to select the 438-sample size from each selected school.

Table 2. Sampled Secondary Schools and Proportionate Sample Sizes

S/N	Selected School	Population	7.07%
Private Secondary Schools			
1	Iqra College, Ilorin	403	28
2	Socrates Model College	419	30
3	Baptist Model High School, Gbagba	406	28
4	Islamic College, Hajj Camp, Ilorin	518	36
5	Divine Grace and Mercy International School	186	13
6	Great Success Step College	193	14
7	Our Lady of Mount Carmel Private School	192	14
8	Al-Furqan College, Gbagba, Ilorin	491	35
Public Secondary Schools			
9	GDSS Oko-Erin, Ilorin	684	48
10	Community Secondary School, Baboko	500	35
11	GDSS Alore	615	44
12	Government Secondary School, Adewole	692	49
13	Government Secondary School, Afon	200	15
14	Akewushola College, Amoyo, Ilorin	300	21
15	Community Secondary School, Ogbondoroko	400	28
	Total	6,199	438

2.4. Instrument

A two-part self-structured questionnaire was used as the main data collection tool. Section B included eighteen items evaluating the psychosocial impacts of teenage pregnancy among female students in Ilorin, Kwara State. Whereas, section A asked respondents for demographic information. Three subject-matter experts from the Department of Health Promotion and Environmental Health Education, Faculty of Education,

University of Ilorin, evaluated the material to determine its face and content validity. The split-half method was used to assess the instrument's dependability.

2.5. Ethical Considerations

Before students could take part, the administration of each selected secondary school provided verbal informed consent, and the University of Ilorin Ethics and Research Committee issued ethical clearance (Ref. No.: UERC/ASN/2024/2705). Each school had two qualified research assistants who assisted in distributing the surveys.

2.6. Data Analysis

The research topics were addressed using descriptive statistics, such as frequency counts and percentages. The hypotheses were tested using chi-square analysis at a significance threshold of 0.05.

3. RESULTS

3.1. Stress and Anxiety as Psychosocial Effects of Teenage Pregnancy

Table 3. Frequency Distribution of Stress and Anxiety Responses among Teenage Mothers

Items	Yes	No
Since becoming pregnant, do you often feel stressed?	280 (63.9%)	158 (36.1%)
Do you feel overwhelmed by the dual responsibilities of school and motherhood?	310 (70.8%)	128 (29.2%)
Do teenage mothers experience frequent feelings of nervousness?	239 (54.6%)	199 (45.4%)
Do you feel anxious about balancing schoolwork and childcare?	300 (68.5%)	138 (31.5%)
Do you worry about your future because of the pregnancy?	295 (67.4%)	143 (32.6%)

As shown in Table 3, the majority of respondents ranging from 239 (54.6%) to 310 (70.8%) reported experiencing some form of stress or anxiety. These results showed that among the research population, stress and anxiety were not only common but also significant psychosocial consequences of teenage pregnancy.

3.1. Chi-square Analysis of Stress and Anxiety

Table 4. Chi-square Analysis of Stress and Anxiety as Psychosocial Effects of Teenage Pregnancy

Items	Yes	No	*df*	Cal. χ^2	Tab. χ^2	Decision
Since becoming pregnant, do you often feel stressed?	280 (63.9%)	158 (36.1%)	3	29.52	7.815	H_0 Rejected
Do you feel overwhelmed by the dual responsibilities of school and motherhood?	310 (70.8%)	128 (29.2%)				
Do teenage mothers experience frequent feelings of nervousness?	239 (54.6%)	199 (45.4%)				
Do you feel anxious about balancing schoolwork and childcare?	300 (68.5%)	138 (31.5%)				

Teenage pregnancy and reported emotions of stress and anxiety were statistically significantly correlated, according to the Chi-square analysis ($\chi^2 = 29.52$, $df = 3$, $p < 0.05$). The null hypothesis was rejected since the computed value was greater than the critical value of 7.815. Teenage moms were overburdened by the duties of both childcare and school attendance, according to the majority of respondents. These results showed that the perceived psychological load was strongly linked to the experiences of teenage pregnancy and cannot be attributed to random fluctuation.

3.3. Depression as a Psychosocial Effect of Teenage Pregnancy

Table 5. Frequency Distribution of Depression Symptoms among Teenage Mothers

Items	Not at all (0)	Several days (1)	More than half the days (2)	Nearly every day (3)
Since becoming pregnant, how often have you felt sad or down?		138	150	150
How often do you feel hopeless about your situation?	24	100	110	204
How often have you lost	91	108	120	119

Items	Not at all (0)	Several days (1)	More than half the days (2)	Nearly every day (3)
interest in activities you previously enjoyed?				
How often do you find it difficult to get motivated to do daily tasks?	30	156	131	121

Table 5 shows that 438 respondents reported experiencing depressive symptoms frequently. For instance, 300 respondents (68.4%) reported feeling sad or down more than half the days or nearly every day. On the other hand, 314 respondents (71.7%) indicated feeling hopeless more than half the days or nearly every day. Similarly, 239 respondents (54.6%) reported losing interest in previously enjoyed activities more than half the days or nearly every day. Moreover, 252 respondents (57.5%) experienced difficulty in getting motivated for daily tasks more than half the days or nearly every day. These figures suggest that depression was a significant psychosocial effect among teenage mothers in the study population.

3.4. Chi-square Analysis of Depression

Table 6. Chi-square Analysis of Depression as a Psychosocial Effect of Teenage Pregnancy

Items	Not at all (0)	Several days (1)	More than half the days (2)	Nearly every day (3)	*df*	Cal. χ^2	Tab. χ^2	Decision
Felt sad or down	0 (0%)	138 (31.5%)	150 (34.2%)	150 (34.2%)	9	82.47	16.92	H_0 Rejected
Feel hopeless	24 (5.5%)	100 (22.8%)	110 (25.1%)	204 (46.6%)				
Lost interest in activities	91 (20.8%)	108 (24.7%)	120 (27.4%)	119 (27.2%)				
Difficult to get motivated	30 (6.8%)	156 (35.6%)	131 (29.9%)	121 (27.6%)				

The chi-square analysis yielded a calculated value of $\chi^2 = 82.47$, which substantially exceeded the critical table value of 16.919 at nine degrees of freedom ($df = 9$) and a significance level of $p < 0.05$. Consequently, the null hypothesis was rejected, confirming that the severity levels of depressive symptoms ranging from mild to moderate to severe were not uniformly distributed but were statistically significant among teenage mothers in the

study population.

3.5. Low Self-esteem as a Psychosocial Effect of Teenage Pregnancy

Table 7. Frequency Distribution of Self-esteem Indicators among Teenage Mothers

Items	Yes	No
Since becoming pregnant, do you feel less confident about yourself?	240 (55.8%)	190 (44.2%)
Do you often doubt your ability to manage school and motherhood?	287 (66.7%)	143 (33.3%)
Do you feel embarrassed or ashamed about being a teenage mother?	290 (67.4%)	140 (32.6%)
Have you noticed a decrease in how much you value yourself?	310 (72.1%)	120 (27.9%)

The majority of teenage mothers reported lower self-esteem, as shown in Table 7: 55.8% felt less confident, 66.7% questioned their ability to manage motherhood and school, 67.4% felt ashamed or embarrassed of their status as teenage mothers, and 72.1% reported a lower sense of self-worth.

3.6. Chi-square Analysis of Self-esteem

Table 8. Chi-square Analysis of Low Self-esteem as a Psychosocial Effect of Teenage Pregnancy

Items	Yes	No	*df*	Cal. χ^2	Tab. χ^2	Decision
Feel less confident about yourself	240 (55.8%)	190 (44.2%)	3	27.15	7.815	H_0 Rejected
Often doubt ability to manage school and motherhood	287 (66.7%)	143 (33.3%)				
Feel embarrassed or ashamed	290 (67.4%)	140 (32.6%)				
Noticed decrease in self-worth	310 (72.1%)	120 (27.9%)				

Since the Chi-square value of 27.15 was higher than the critical value of 7.815 at three degrees of freedom ($p < 0.05$), the null hypothesis was

rejected. These findings confirmed that low self-esteem was a significant psychosocial effect of adolescent pregnancy within the study sample.

3.7. Low Academic Performance as a Psychosocial Effect of Teenage Pregnancy

Table 9. Frequency Distribution of Academic Performance Indicators among Teenage Mothers

Items	Yes	No
Has your academic performance declined since becoming pregnant?	200 (60.61%)	130 (39.39%)
Does childcare adversely affect your schoolwork?	191 (44.44%)	239 (55.56%)
Have you missed school frequently due to pregnancy or childcare?	241 (56.07%)	189 (43.93%)
Have you considered dropping out of school?	305 (70.91%)	125 (29.09%)

Table 9 shows that most adolescent mothers had academic challenges: 60.61% said their academic performance had declined, 44.44% stated that childcare negatively impacted their academics, 56.07% said they frequently missed school, and 70.91% said they had thought about quitting school.

3.8. Chi-square Analysis of Academic Performance

Table 10. Chi-square Analysis of Low Academic Performance as a Psychosocial Effect of Teenage Pregnancy

Items	Yes	No	df	Cal. χ^2	Tab. χ^2	Decision
Academic performance declined	200 (60.61%)	130 (39.39%)	3	63.39	7.815	H_0 Rejected
Childcare affects schoolwork	191 (44.44%)	239 (55.56%)				
Missed school frequently	241 (56.07%)	189 (43.93%)				
Considered dropping out	305 (70.91%)	125 (29.09%)				

Childcare obligations and scholastic difficulties were significantly

correlated, according to the Chi-square analysis ($\chi^2 = 63.39$, $df = 3$, $p < 0.05$). The rejection of the null hypothesis suggested that adolescent mothers' academic performance was severely hampered by childcare obligations.

4. DISCUSSION

With respect to class distribution, SS3 students constituted the largest group ($n = 178$, 41.3%), followed by SS1 ($n = 159$, 36.3%) and SS2 ($n = 101$, 23.0%). Most of the participants were in the 14-17 age range. The majority of parents ($n = 280$, 63.9%) had received an informal education, whereas 158 (36.1%) had attended an Islamic school.

The discovery that there was a significant correlation between teenage pregnancy and stress as well as anxiety ($\chi^2 = 29.52$, $p < 0.05$) is consistent with earlier studies carried out in Ile-Ife, Nigeria. According to these researches, teens who get pregnant frequently experience elevated levels of stress and anxiety. This happens due to certain feelings, such as partner rejection, unintended pregnancies, heavy household responsibilities, pregnancy depression, and a lack of social support. These consistent results demonstrate the pervasive psychological suffering that adolescent mothers in Nigeria face.

Depression was discovered to be another significant psychological impact of adolescent pregnancy. This finding is consistent with earlier studies that demonstrate the psychosocial effects of teenage pregnancy, including mental distress and hopelessness. Pregnant teenagers frequently exhibit symptoms of pessimism, low self-esteem, and perceived neglect, according to research [4]. The present results are in line with the studies showing that postpartum depression occurs at a rate nearly twice as high as that of adult mothers, and that adolescent mothers are considerably more likely to develop depression-related symptoms. Pregnant teenagers face additional emotional challenges as a result of adverse social experiences, such as abuse and betrayal by family members.

The conclusion that teenage pregnancy has a major impact on self-esteem is supported by earlier research conducted in Ibadan, Oyo State, which indicated a statistically significant correlation between low self-esteem and adolescent pregnancy ($r = 0.376$, $p < 0.05$) [4]. According to reports, teenage moms who have low self-esteem are more likely to participate in risky sexual behaviors, which raises the likelihood of getting

pregnant again.

The correlation between childcare responsibilities and poor academic performance ($\chi^2 = 63.39$, $p < 0.05$) is in line with research from Calabar South, Cross River State. This research found that the demands of early motherhood and the lack of institutional support caused teenage mothers to miss school frequently, disengage from classroom participation, and face an increased risk of dropout. Similarly, stigmatization, school suspensions, chronic absenteeism, and ongoing academic challenges hindered pregnant students' ability to continue their education, according to research from Awka South, Anambra State [6]. Similar results from Ekiti State showed that juggling childcare and schoolwork at the same time often led to lower marks and more psychological stress. These results are supported by the current study, which found that 60.61% of participants reported a reduction in their grades, 56.07% reported frequent absences, and 70.91% had thought about abandoning out due to the demands of becoming a mother at a young age [13].

4.1. Conclusion

This study provided convincing proof that teenage pregnancy has detrimental psychological effects on secondary school age mothers. Teenage mothers in Ilorin, Kwara state, frequently struggle with depression, anxiety, tension, and low self-esteem. Moreover, inadequate family support and social stigma exacerbate these psychological issues. Their educational advancement is also hampered by the demands of childcare. This further increases absenteeism, lowers academic performance, and increases the likelihood of dropping out of school. The results demonstrated the critical need for all encompassing, multi- level interventions in Nigerian secondary schools that concurrently address the social, emotional, and intellectual needs of young mothers and pregnant teenagers.

4.2 Recommendations

Based on the findings of this study, the following recommendations were proposed:

- Schools should establish structured peer support groups to provide adolescent mothers with safe spaces to discuss their experiences, receive assistance, and reduce feelings of social isolation.
- Teachers and school administrators should take part in capacity-

building workshops to learn evidence-based strategies for offering adolescent mothers and pregnant students compassionate, nondiscriminatory support.

- Schools should develop flexible, alternate scheduling choices, such as make-up classes and extra learning resources, to assist adolescent mothers who miss school due to childcare responsibilities.
- Each school should have a certified guidance counselor or welfare officer assigned specifically to provide academic assistance, psychosocial support, and referral services to pregnant students and adolescent mothers.
- School-based sensitization activities should be implemented in order to cultivate a culture of empathy and understanding among students, staff, and the greater school community regarding the challenges faced by adolescent mothers.
- Schools should frequently hold workshops and educational forums for families of young mothers in order to promote supportive home environments and reduce stigmatization in the home.

Author Contribution

Bello Abdullateef: sole author

Conflict of Interest

The authors of the manuscript have no financial or non-financial conflict of interest in the subject matter or materials discussed in this manuscript.

Data Availability Statement

Data supporting the findings of this study will be made available by the corresponding author upon request.

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