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Prevalence and Determinant of Teenage Pregnancy Among the Patients Attending Sexual and Gender Based Violence Unit at General Hospital Gusau Nigeria (2023 - 2024)

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Teenage pregnancy is a persistent public health concern in low- and middle-income countries, including Nigeria, where socio-economic and gender-based vulnerabilities increase adolescent risk. This study assessed the prevalence, contributing factors, consequences, and prevention strategies of teenage pregnancy among adolescents attending the Sexual and Gender-Based Violence (SGBV) Unit at General Hospital Gusau, Zamfara State. A descriptive cross-sectional study was conducted from June 2023 to May 2024. Using purposive sampling, 74 adolescent girls aged 13–19 years were recruited. Data were collected through structured questionnaires and hospital records. Descriptive statistics were applied, and prevalence was estimated with 95% confidence intervals (CIs). The prevalence of teenage pregnancy was 4.1% (95% CI: 0.1%–11.6%), with most cases among late adolescents (16–19 years). Contributing factors included poverty (24.3%), low educational attainment (18.9%), and sexual abuse (16.2%). Reported psychosocial consequences were stigma (48.6%) and maternal depression (31.1%). Healthcare providers recommended strengthening adolescent health services, early identification of high-risk behaviours, and improving access to family planning, though resistance to comprehensive sexuality education was noted. Despite the relatively low prevalence, teenage pregnancy in this setting is linked with significant psychosocial and socio-economic burdens. Addressing this issue requires integrated, culturally sensitive interventions that reduce poverty, expand educational opportunities, prevent sexual abuse, and improve adolescent-friendly reproductive health services. Greater community acceptance of sexuality education and protection of adolescent reproductive rights are critical to sustainable prevention.

Keywords: Adolescent, pregnancy, Sexual violence, Gusau, Zamfara State.

1. Introduction

Adolescent pregnancy, defined by the World Health Organization (WHO) as pregnancy in girls aged 10–19 years, is a critical global public health issue (World Health Organization, 2020). It is particularly prevalent in low- and middle-income countries, where poverty, gender inequality, child marriage, and limited access to adolescent-friendly reproductive health services increase vulnerability (United Nations Population Fund [UNFPA], 2022). Sub-Saharan Africa carries the highest adolescent birth rate worldwide, reflecting both structural inequities and cultural practices that restrict girls' autonomy (UNFPA, 2022).

Beyond being a medical concern, adolescent pregnancy is linked to socio-economic and cultural determinants, with severe consequences for both

mother and child. Adolescent mothers face elevated risks of obstetric complications such as eclampsia, infections, and obstructed labour, while their infants are more likely to be born preterm, with low birth weight, or experience neonatal mortality (Neal et al., 2012; Ganchimeg et al., 2014). These outcomes perpetuate cycles of poor health, poverty, and limited educational attainment.

In Nigeria, adolescent pregnancy remains widespread, with nearly one in four girls aged 15–19 having begun childbearing (National Population Commission (NPC & ICF, 2019). The country's adolescent birth rate is among the highest globally (UNFPA, 2021). Although sexuality education has been introduced into the school curriculum as a preventive strategy, implementation has been weak.

Barriers include poor teacher training, resistance from parents and religious leaders, and a lack of community support (Bamidele et al., 2010). As a result, many adolescent girls remain uninformed or ill-equipped to make safe reproductive health choices.

Zamfara State in northwestern Nigeria presents a particularly challenging context. The region is affected by persistent insecurity, including banditry and mass displacement, which has disrupted education and weakened health service delivery (International Crisis Group, 2020). Reproductive health infrastructure is inadequate, with limited adolescent-friendly services, shortage of trained personnel, and poor outreach to rural areas (Afolabi et al., 2018). These structural weaknesses intersect with cultural norms that promote child marriage and restrict female autonomy, exposing girls to early sexual debut, sexual exploitation, and gender-based violence (Adebawale et al., 2016; Izugbara et al., 2019). Teenage pregnancies in this context often result in school dropout, social ostracism, forced marriage, and lifelong economic disadvantage. Stigma remains high, with many adolescent mothers rejected by families or expelled from school, compounding their vulnerability (Izugbara et al., 2019; Chiwuzie & Okolocha, 2001).

Despite the high risks, there is limited empirical evidence on the prevalence, determinants, and consequences of adolescent pregnancy in Zamfara State, particularly among girls seeking care in specialized health units. This study therefore aims to determine the prevalence of adolescent pregnancy among patients attending the Sexual and Gender-Based Violence (SGBV) Unit at General Hospital Gusau.

2. Material and Methods

2.1 Area and Setting of the Study

The study was conducted at the Sexual and Gender-Based Violence (SGBV) Unit of General Hospital Gusau, a state-owned secondary healthcare facility located in Zamfara State, northwestern Nigeria. The hospital provides a range of outpatient, inpatient, and specialized services, including a Sexual Assault Centre and family planning services, and serves as a major referral centre within the state.

2.2 Target Population

The target population comprised adolescent pregnant girls aged 13–19 years who attended the SGBV Unit at General Hospital Gusau between June 2023 and May 2024. A total of 74 adolescent pregnant girls were identified and included in the study.

2.3 Ethical Considerations

Ethical approval for the study was obtained from the Zamfara State Ministry of Health Research and Ethics Committee (Approval No: ZSMOH/REC/2023/045). An introductory letter was also secured from the School Research Committee. Written informed consent was obtained from participants, and confidentiality of personal and medical data was assured.

2.3 Study Design, Sample Size, and Sampling Technique

A descriptive cross-sectional study design was employed. The total accessible population was 74 adolescent pregnant girls, and using Yamane's simplified formula for sample size calculation at a 10% margin of error, the sample size was determined to be approximately 74. Purposive (non-probability) sampling was used to include all eligible respondents who met the study criteria within the study period.

2.4 Instrument for Data Collection

Data were collected using a structured, researcher-designed questionnaire and checklist. The instrument was divided into four sections: (A) demographic data, (B) prevalence of teenage pregnancy, (C) contributing factors and consequences, and (D) preventive strategies. Section D contained seven items rated on a 4-point Likert scale: Strongly Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1). Reliability of the tool was established through a pilot test on 10 adolescents in a similar setting, yielding a Cronbach's alpha coefficient of 0.82, indicating good internal consistency. Face and content validity were reviewed by experts in public health and reproductive health.

2.5 Data Analysis

Data were coded and entered into the Statistical Package for the Social Sciences (SPSS) version 26 for analysis. Descriptive statistics (frequencies and percentages) were used to summarize demographic and categorical variables. The prevalence of teenage pregnancy was calculated with 95% confidence intervals (Cis). Findings were presented in tables and charts for clarity.

3. Results and Discussion

3.1 Results

A total of 74 adolescent girls aged 13–19 years were included. The majority (71.6%) were late adolescents (16–19 years), 71.6% were single, and 79.7% had only informal education. All respondents were Hausa Muslims, reflecting the cultural homogeneity of the study population. Out of 74 adolescents, three were pregnant, yielding a

prevalence of 4.1% (95% CI: 0.9–11.5%). Most cases occurred among late adolescents.

The leading contributors to teenage pregnancy were poverty (24.3%), low educational attainment (18.9%), and sexual abuse (16.2%). Inadequate parental support (10.8%) and single parenting (10.8%) were also frequently reported. Peer pressure was the least reported (1.3%).

Psychosocial outcomes predominated. Stigma (48.6%; 95% CI: 36.8–60.6%) and maternal depression (31.1%; 95% CI: 20.8–43.3%) were most common, followed by rejection (21.6%) and school dropout (10.8%). Physical consequences such as maternal morbidity/mortality were less frequent (6.8%).

Healthcare staff (n=8) emphasised early identification of high-risk behaviours (mean=3.5), strengthening adolescent health services (3.3), and improving family planning access (2.8). Poverty alleviation (2.7) and preventing early marriage (2.7) were also endorsed. However, sexuality education and decision-making guidance were not supported (mean=2.3).

Table 1. Prevalence of Teenage Pregnancy

Total Adolescents	Pregnant Cases	Prevalence % (95% CI)
74	3	4.1% (0.9–11.5)

Table 2. Contributing Factors to Teenage Pregnancy

Factor	n	%
Poverty	18	24.3
Low educational level	14	18.9
Sexual abuse/rape	12	16.2
Inadequate parental support	8	10.8
Single parenting	8	10.8
Broken homes	6	8.1
Early marriage	2	2.7
Peer pressure	1	1.3

Table 3. Consequences of Teenage Pregnancy

Consequence	n	% (95% CI)
Stigma	36	48.6 (36.8–60.6)
Maternal depression	23	31.1 (20.8–43.3)
Rejection	16	21.6 (13.0–33.4)
School dropout	8	10.8 (5.1–20.0)
Abortion	6	8.1 (3.0–16.7)

Consequence	n	% (95% CI)
Maternal morbidity/mortality	5	6.8 (2.3–15.3)

3.2 Discussion

This study explored the prevalence, determinants, and consequences of teenage pregnancy among adolescents attending the SGBV unit at General Hospital Gusau. Findings reveal the multifaceted nature of adolescent pregnancy, shaped by socio-economic deprivation, educational disadvantage, sexual violence, and weak family support systems.

Teenage pregnancy was relatively infrequent during the study period, with most cases occurring among late adolescents (16–19 years). However, temporal clustering of cases in specific months suggests environmental or situational drivers that warrant further exploration (Neal et al., 2012). Although small in absolute numbers, each case reflects significant underlying vulnerabilities, including sexual exploitation and inadequate access to contraception. This facility-based prevalence contrasts with national survey estimates, which report higher rates of adolescent childbearing in northern Nigeria compared to the south (NPC & ICF, 2019; Okoli et al., 2022).

Poverty was the most significant contributor, consistent with evidence that economic hardship promotes early marriage, transactional sex, and limited access to reproductive health services (UNFPA, 2022; Eze et al., 2023). Limited education further increased vulnerability, as girls with little or no formal schooling are less informed about reproductive health and face restricted opportunities for empowerment (NPC & ICF, 2019; UNFPA, 2021; Izugbara et al., 2019; Umar et al., 2024). Experiences of sexual abuse were also strongly associated with teenage pregnancy, echoing findings from other Nigerian and African studies (Afolabi et al., 2018; Adebowale et al., 2016). The predominance of single respondents and weak family support systems underscores the importance of protective family structures in mitigating risk (Omeje et al., 2021).

Psychosocial outcomes dominated the reported consequences, with stigma, depression, and rejection being most common (Izugbara et al., 2019; Umar et al., 2024). These findings align with prior Nigerian studies linking adolescent pregnancy to poor mental health, low self-esteem, and social exclusion (Chiwuzie & Okolocha, 2001). Educational disruption and reduced future opportunities were also evident, perpetuating cycles of poverty and dependence (Okoli et al., 2022). Interestingly, no obstetric complications such as pre-eclampsia or low birth weight were reported. This contrasts with evidence from sub-Saharan Africa that consistently demonstrates elevated obstetric risks among adolescent mothers (Ganchimeg et al., 2014). The absence of clinical complications here may reflect

underreporting, limited follow-up, or the respondents' emphasis on psychosocial rather than biomedical outcomes.

Healthcare workers identified strategies including expansion of adolescent health services, increased access to family planning, and early identification of high-risk behaviours (World Health Organization, 2020; Eze et al., 2023). These align with global best practices. However, disagreement over the provision of comprehensive sexuality education (CSE) was observed, reflecting cultural resistance and misconceptions about its purpose (Bamidele et al., 2010). Similar ambivalence has been documented in Nigeria and other African contexts, despite evidence that CSE improves knowledge and reduces risky behaviours (UNFPA, 2022; Umar et al., 2024).

The determinants identified in this study—poverty, limited education, and sexual abuse—mirror findings from national and regional analyses (Adebawale et al., 2016; Izugbara et al., 2019; Okoli et al., 2022). However, the prevalence observed here was lower than population-based estimates, highlighting the differences between facility-based and community-level data (NPC & ICF, 2019). The emphasis on psychosocial consequences complements broader African evidence that highlights both psychosocial and biomedical risks (Neal et al., 2012; Eze et al., 2023). The ambivalence towards sexuality education also reflects wider regional challenges in aligning policy with cultural norms (Bamidele et al., 2010; Omeje et al., 2021).

These findings underscore the need for multi-sectoral interventions that extend beyond the health system:

Adolescent-friendly SRH services: integrate contraception, psychosocial support, and mental health care into adolescent and SGBV services.

Education and poverty reduction: implement school retention programs and conditional cash transfers to mitigate economic drivers of early marriage and transactional sex.

Culturally sensitive sexuality education: collaborate with community and religious leaders to design and deliver acceptable CSE programs.

Child protection and GBV prevention: strengthen reporting systems and survivor support services to reduce sexual abuse as a proximate cause of teenage pregnancy.

This study has several limitations. First, it was facility-based and limited to a single hospital, restricting generalizability. Second, its cross-sectional design precludes causal inference and may be affected by recall bias. Third, the absence of clinical complications may reflect underreporting or incomplete follow-up. Fourth, small case numbers and temporal clustering reduce precision of prevalence estimates. Finally, stigma and fear of disclosure may have led to underreporting of sensitive experiences such as sexual abuse or transactional sex.

4. Conclusion

This study found that although the prevalence of teenage pregnancy in Gusau was relatively low, it is strongly driven by poverty, limited education, and sexual abuse. The consequences were primarily psychosocial, including stigma, depression, and school dropout, underscoring the need for integrated support services. Nurses and other health workers play a central role in prevention through education, counselling, and community engagement. Strengthening reproductive health services, expanding educational opportunities, and conducting broader studies across Zamfara and beyond are essential for guiding policy and promoting adolescent well-being.

Conflict of Interest

The authors declare no conflict of interest.

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