



JOURNAL OF COMMUNITY MEDICINE AND PRIMARY HEALTH CARE

ORIGINAL ARTICLE

COMMUNITY KNOWLEDGE, ATTITUDES, AND HEALTH CONSEQUENCES OF CHILD MARRIAGE IN NSUKKA, NIGERIA

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Keywords

Attitude,
Child Marriage,
Knowledge,
Maternal
Health,
Neonatal Health,
Socio-Cultural
Norms.

Abstract

Background: Child marriage, defined as marriage before 18 years, remains a significant public health and human rights concern globally and in Nigeria. In southeastern Nigeria, socio-cultural norms, family expectations, and economic pressures perpetuate early marriage despite legal restrictions. This study assessed community knowledge, attitudes, and perceptions of child marriage and its health consequences in Nsukka, Enugu State, Nigeria.

Methods: A mixed-methods cross-sectional study was conducted from March to May 2025 among 412 adults sampled from five wards in Nsukka LGA of Enugu, Nigeria. Structured questionnaires captured socio-demographics, awareness, knowledge, and attitudes, scored and graded as good/fair/poor and negative/neutral/supportive. Qualitative data from six focus group discussions and ten key informant interviews were analyzed thematically. Quantitative data were summarized with descriptive statistics and multivariate logistic regression to identify predictors of supportive attitudes.

Results: Participants were mostly female (56.3%) and aged 25–34 years (38.6%). Awareness was high (82.3%), but only 58.2% correctly identified the legal minimum age. Negative attitudes predominated (69.4%), with 30.6% supportive or neutral. Low education, poverty, and poor knowledge predicted supportive attitudes. Recognized maternal and neonatal risks included obstructed labour (44.2%), anaemia (38.8%), and low birthweight (34.5%).

Conclusion: Child marriage persists in Nsukka due to socio cultural and economic factors. Targeted health education, legal enforcement, socio-economic empowerment, community engagement, and adolescent-friendly health services are needed to reduce early marriage and improve maternal and neonatal outcomes.

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Article History:

Date received: 24/11/2025

Date accepted: 25/02/2026

INTRODUCTION

Child marriage, defined as the formal or informal union of individuals under the age of 18, remains a major public health, developmental, and human rights concern globally and in Nigeria.^{1,2} Each year, an estimated 12.0 million girls worldwide marry before age 18, with sub-Saharan Africa disproportionately affected.^{3,4} In Nigeria, approximately 44.0% of girls marry before 18 years, and 18.0% before age 15.⁵ While the practice is more prevalent in northern Nigeria, evidence indicates that it persists in southern states, including rural and peri-urban communities of Enugu State.^{6,7} Cultural, religious, and economic factors continue to reinforce early marriage in these areas.⁸ The persistence of child marriage is driven by entrenched socio-cultural norms, family expectations, gender inequality, economic hardship, and limited educational opportunities for girls.^{9,10,11} Adolescent girls are particularly vulnerable to adverse maternal and neonatal outcomes, including obstructed labour, hypertensive disorders of pregnancy, anaemia, postpartum haemorrhage, obstetric fistula, low birthweight, prematurity, birth trauma, and neonatal death.^{12,13} Infants of adolescent mothers' experience higher rates of low birthweight, prematurity, birth trauma, and neonatal mortality, while girls face interruptions in education, loss of autonomy, and reduced economic potential.^{14,15,16} Despite these risks, community awareness of legal restrictions and health consequences remains limited, particularly in southeastern Nigeria.¹⁷ Nsukka Local Government Area (LGA) was selected for this study as a representative rural and peri-urban setting in southeastern Nigeria, where traditional and cultural practices strongly influence marriage decisions. Nsukka has a moderate literacy rate, active community and religious leadership, and a growing population of adolescents at risk of early marriage, making it suitable for assessing community knowledge, attitudes, and perceptions. While national and regional surveys provide aggregated data, localized, community-level evidence in Nsukka is scarce, limiting the ability of policymakers, health practitioners, and program planners to design effective interventions.^{18,19}

Although studies exist at national and regional levels few have combined quantitative and qualitative approaches to explore community-level knowledge, attitudes, and perceptions of health consequences in southern Nigeria.^{20,21,22}

This study assessed community knowledge, attitudes, and perceptions of child marriage and its health consequences in Nsukka, Enugu State, Nigeria generates context-specific evidence to guide culturally appropriate, community-based interventions designed to reduce child marriage and improve maternal and neonatal outcomes in Nsukka LGA.

METHODS

Study Area and Design

This descriptive cross-sectional study was conducted in Nsukka Local Government Area of Enugu State, Nigeria using a mixed-methods approach, from March to May 2025. Nsukka has an estimated population of approximately 391,000 residents, predominantly Igbo-speaking, with several rural and peri-urban communities. The area is characterized by diverse cultural practices, social norms, and economic activities including subsistence agriculture, trade, artisanal work, and a growing number of civil servants. Literacy levels are moderate, with over 70.0% of adults able to read and write. School attendance is higher among children and adolescents in urban communities than in rural areas, although dropout rates particularly among girls remain a concern.

Study Population

The study population comprised adults aged 18 years and above who had resided in the selected communities for at least six months at the time of the study (March–May 2025). Temporary visitors and those living in the area for less than six months were excluded to ensure familiarity with local cultural practices and social norms regarding marriage. Both men and women were eligible, and participants were drawn from selected households across the study communities using multistage sampling.

Sample Size Determination

The sample size was calculated using Cochran's formula for cross-sectional surveys.²³

$$n_0 = \frac{Z^2 \cdot p \cdot q}{d^2}$$

Table 1. Socio-Demographic Characteristics of Respondents (N = 412)

Variable	Category	Frequency (n)	Percentage (%)
Age (years)	15–24	72	17.5
	25–34	159	38.6
	35–44	113	27.4
	≥45	68	16.5
Sex	Male	180	43.7
	Female	232	56.3
Marital status	Single	124	30.1
	Married	252	61.2
	Divorced/Widowed	36	8.7
Education	No formal	34	8.3
	Primary	92	22.3
	Secondary	217	52.7
	Tertiary	69	16.7
Occupation	Farmer	68	16.5
	Trader/Artisan	132	32.0
	Civil servant	94	22.8
	Student	76	18.4
	Unemployed	42	10.2

Where:

- $Z = 1.96$ (standard normal deviate at 95% confidence interval)
- $p = 0.5$ (expected prevalence of adequate knowledge due to limited local estimates)
- $q = 1 - p = 0.5$
- $d = 0.05$ (margin of error for population proportion)

Substituting the values:

$$n_0 = \frac{(1.96)^2 \cdot 0.5 \cdot 0.5}{(0.05)^2} = 384$$

To account for potential non-response, 10.0% was added, giving a final sample size of 420 respondents.

Sampling Technique

Quantitative Sampling

A multistage sampling approach was employed:

Stage 1: Ward selection- Five wards were selected: Nsukka Urban, Obimo, Ede-Oballa, Ibagwa-Aka, and Amokwe.

Stage 2: Community selection- Within each ward, two communities were randomly selected by balloting to capture socio-cultural diversity: Nsukka Town and Obukpa; Obimo and Amaeze; Ede-Oballa and Akwuoke; Ibagwa-Aka and Akpawfu; Amokwe and Ugwuogo.

Stage 3: Household selection- All households in selected communities were enumerated, and a systematic sampling interval (k) was calculated as:

$$k = \frac{\text{Total number of eligible households}}{\text{Number of respondents required}}$$

The first household was selected at random by lottery, after which every fifth household was systematically included in the study. The sampling interval ($k = 5$) was determined by dividing the total number of households by the required sample size.

Stage 4: Respondent Selection- One eligible adult per household was selected randomly using the lottery method if multiple adults were present.

Qualitative Sampling

Six focus group discussions (FGDs) were conducted with 6–8 participants each, stratified by gender and age, to explore perceptions, socio-cultural norms, and barriers related to child marriage. Ten key informant interviews (KIIs) were conducted with community leaders, traditional rulers, religious leaders, and healthcare providers to gain expert insights on local marriage practices and health outcomes.

FGD and KII participants were purposively selected based on residency, knowledge of local practices, and willingness to participate.

Table 2. Community Knowledge of Child Marriage (N = 412)

Knowledge Indicator	Yes n (%)	No n (%)
Heard of child marriage	339 (82.3)	73 (17.7)
Knows legal marriage age (18 yrs)	240 (58.2)	172 (41.8)
Knows child marriage causes obstetric risks	274 (66.5)	138 (33.5)
Knows neonatal complications possible	243 (58.9)	169 (41.1)
Aware of long-term reproductive consequences	175 (42.5)	237 (57.5)

Data Collection Instruments

Quantitative data: Structured, interviewer-administered questionnaires were adapted from UNICEF and DHS surveys and previous Nigerian studies.^{13, 18} The questionnaire captured sociodemographic characteristics, awareness and knowledge of child marriage, attitudes, socio-cultural drivers, and perceived maternal and neonatal health risks. The instrument was pre-tested in a neighboring community for clarity, cultural appropriateness, and reliability.

Qualitative data: Semi-structured FGD and KII guides were developed using WHO and UNFPA frameworks and reviewed by local experts. Questions were structured to elicit participants' knowledge, attitudes, perceptions, socio-cultural influences, and health consequences associated with child marriage.

Scoring and Grading of Knowledge and Attitudes

Awareness was measured dichotomously (aware vs. not aware). Knowledge was assessed via multiple questions on legal age, maternal, and neonatal risks; a composite score was generated and categorised as good, fair, or poor. Attitudes were scored using Likert-type items and categorised as negative, supportive, or neutral.

Data Analysis

Quantitative analysis: Data were entered into IBM SPSS version 26. Descriptive statistics (frequencies and percentages) summarized sociodemographics, knowledge, attitudes, and reported health consequences. Bivariate associations were assessed using chi-square tests, and variables with $p < 0.20$ were included in a multivariate logistic regression model to identify predictors of supportive or neutral attitudes. A

higher cutoff ($p < 0.20$) was used to ensure inclusion of potentially important variables rather than risk exclusion at the conventional 0.05 threshold. Statistical significance in the multivariate model was set at $p < 0.05$.

Qualitative analysis: FGD and KII transcripts were analysed using thematic content analysis. Codes were developed inductively grouped into themes and sub-themes, and findings were triangulated with quantitative data to provide a comprehensive understanding of drivers, barriers, and perceptions related to child marriage.

Ethical Considerations

Ethical approval was obtained from the Enugu State Ministry of Health Research Ethics Committee (Reference: ES/REC/2025/041). Written informed consent was obtained from all participants. Anonymity and confidentiality were maintained, and participants were informed of their right to withdraw without consequences. All data were securely stored and accessed only by the research team.

RESULTS

The study included 412 adults. Most respondents were aged 25–34 years (38.6%), females (56.3%), and married (61.2%). Educational attainment was predominantly secondary level (52.7%), with 8.3% having no formal education. Participants' occupations were diverse, including traders/artisans (32.0%), civil servants (22.8%), students (18.4%), farmers (16.5%), and unemployed individuals (10.2%) (Table 1). Awareness of child marriage was high (82.3%), but only 58.2% correctly identified 18 years as the minimum legal age. Knowledge of maternal risks was moderate (obstructed labour 44.2%, anaemia 38.8%), and neonatal risks were recognized by

34.5–28.4% of respondents. Awareness of long-term reproductive consequences was lowest (42.5%)

Table 3. Community Attitudes toward Child Marriage (N = 412)

Attitude Item	Agree n (%)	Disagree n (%)
Child marriage is culturally acceptable	126 (30.6)	286 (69.4)
It reduces household financial burden	95 (23.1)	317 (76.9)
It prevents premarital sex	76 (18.4)	336 (81.6)
Child marriage should be abolished	305 (74.0)	107 (26.0)

Knowledge was scored via a composite system and graded as good, fair, or poor based on predefined thresholds (Table 2). Negative attitudes predominated (69.4%), although 30.6% of respondents held supportive or neutral views. Most respondents rejected claims that child marriage reduces household financial burden (23.1%) or prevents premarital sex (18.4%). Support for abolishing child marriage was high (74.0%) (Table 3). Attitudes were scored and graded according to the knowledge scoring system. Respondents reported awareness of maternal complications (obstructed labour 44.2%, anaemia 38.8%, preeclampsia/eclampsia 32.5%) and neonatal risks (low birthweight 34.5%, preterm birth 28.4%, neonatal death 23.3%). These are perceptions of potential health consequences, not reported cases within a specific timeframe (Table 4). Participants with good knowledge were more likely to hold negative attitudes (80.1%) compared with those with poor knowledge (52.2%), a statistically significant association ($\chi^2 = 24.17$, $p < 0.001$) (Table 5). Multivariate logistic regression identified low education (AOR = 2.64), poverty (AOR = 1.87), and poor knowledge (AOR = 3.48) as significant predictors of supportive or neutral attitudes toward child marriage. Age <25 years and male sex were not statistically significant (Table 6).

Qualitative Findings

The qualitative component provided insights into social, cultural, and economic factors sustaining child marriage. Analysis of six FGDs and ten KIIs revealed the following key themes:

Socio-cultural Drivers: Traditional norms and family expectations strongly influenced early marriage. Elders and parents often dictated marriage arrangements to preserve family

reputation. Economic hardship was also cited as a driver. One FGD participant noted: *“Sometimes families marry off their daughters early to reduce the cost of feeding and schooling them”* (Female, 32 years). Knowledge of Health Risks: Respondents generally recognized immediate maternal and neonatal risks, such as obstructed labour and low birthweight, but understanding of long-term consequences, including obstetric fistula and psychological effects, was limited. One participant stated: *“We know that girls can have difficulty giving birth if they marry too young, but we don’t always think about how it affects them later in life”* (Male, 28 years).

Attitudes toward Child Marriage: Attitudes varied by age and education. Older less educated participants often held neutral or supportive views, justifying early marriage on cultural or economic grounds, whereas younger more educated respondents opposed it. A participant remarked: *“Girls should stay in school and complete their education. Early marriage brings many health and social problems that could be avoided”* (Male, 26 years).

Barriers to Prevention: Weak enforcement of laws, entrenched cultural norms, and poverty were identified as major obstacles. As one health worker explained: *“Even though the law says girls should marry at 18, many families ignore it because tradition is stronger than government rules here”* (Female, 42 years). Economic pressures were highlighted as a key driver. Overall, despite moderate awareness of health risks, socio-cultural expectations and economic constraints continue to sustain child marriage, highlighting the need for integrated interventions addressing both knowledge and structural drivers.

Table 4. Reported Health Consequences Associated with Child Marriage (N = 412)

Health Outcome	Yes n (%)	No n (%)
Obstructed labour	182 (44.2)	230 (55.8)
Anaemia	160 (38.8)	252 (61.2)
Preeclampsia/eclampsia	134 (32.5)	278 (67.5)
Obstetric fistula	87 (21.1)	325 (78.9)
Low birthweight	142 (34.5)	270 (65.5)
Preterm birth	117 (28.4)	295 (71.6)
Neonatal death	96 (23.3)	316 (76.7)

DISCUSSION

This study examined community knowledge, attitudes, and health consequences of child marriage using a mixed-methods approach. The findings highlight persistent gaps in awareness, socio-cultural influences, and maternal and neonatal health risks associated with early marriage.^{6, 7, 20, 21} Although 82.3% of respondents were aware of child marriage, only 58.2% correctly identified the legal minimum age of 18 years. Awareness of specific maternal and neonatal risks including obstructed labour, anaemia, low birthweight, and neonatal mortality was moderate. These results align with national and regional studies reporting limited knowledge of reproductive and maternal health consequences among adolescents, particularly those with low educational attainment.^{1, 4} Previous studies indicate that adolescent mothers are less likely than adult mothers to recognize complications such as obstructed labour and preeclampsia. Limited knowledge is associated with delayed or inadequate health-seeking behaviour, while poverty further compounds risk by creating economic pressures that encourage early marriage and limit access to reproductive health information and services.⁶ Higher educational attainment and improved household income were associated with greater awareness of legal, health, and social implications of early marriage, fostering negative attitudes toward the practice.⁹ Conversely, limited education and poverty constrain access to information, increase vulnerability, and reinforce traditional practices.^{3, 4} The qualitative insights explain why 30.6% of respondents maintained supportive or neutral attitudes despite moderate awareness of health risks. Economic hardship, family

expectations, and the desire to preserve social reputation often compel early marriage, while entrenched cultural norms normalize the practice as a rite of passage or a protective measure against premarital sex.^{13, 18, 22} These findings corroborate national and global evidence indicating that adolescent mothers are at elevated risk for obstetric complications, including preeclampsia, obstetric fistula, and prolonged labour, as well as adverse neonatal outcomes such as prematurity, low birthweight, birth trauma, and increased neonatal mortality.^{14, 20} Physiological immaturity, coupled with limited access to skilled antenatal and delivery care, exacerbates these risks. The qualitative data reinforced these findings, showing that adolescent brides often face interruptions in education, loss of autonomy, and social isolation, highlighting the multifaceted harms of child marriage. The findings have important implications for policy and research. Moderate awareness combined with persistent supportive attitudes underscores the need for context-specific interventions addressing knowledge gaps and socio-cultural and economic drivers. Policies should prioritize community-based health education programs, strengthening enforcement of existing laws, and engaging traditional and religious leaders. Economic empowerment and support for girls' education are crucial to mitigate the financial pressures that sustain early marriage. The findings indicate that reducing child marriage in Nsukka requires multi-pronged, context-sensitive interventions. Health education campaigns should target both adolescents and adult decision-makers, emphasizing the legal medical, and psychosocial

Table 5. Association between Knowledge and Attitudes toward Child Marriage

Knowledge Level	Negative Attitude n (%)	Supportive/Neutral Attitude n (%)	χ^2	p-value
Good Knowledge (n=251)	201(80.1)	50(19.9)	24.17	<0.001
Poor Knowledge (n=161)	84(52.2)	77(47.8)		

risks of early marriage, as the study revealed gaps in knowledge and moderate awareness. Socio-economic interventions, including poverty alleviation, girls' education, scholarships, and vocational training, are essential to mitigate financial pressures that perpetuate early marriage. Engagement of traditional and religious leaders is critical to challenge entrenched socio-cultural norms and reinforce community support for delayed marriage. Strengthening enforcement of existing laws and improving adolescent-friendly health services can reduce maternal and neonatal risks associated with child marriage. Evidence from Nigeria and other sub-Saharan African countries shows that integrated approaches addressing knowledge, economic drivers, and cultural influences effectively foster negative attitudes toward child marriage.

CONCLUSION

Child marriage remains a persistent public health and social challenge in Nsukka, sustained by deeply entrenched socio-cultural norms, family expectations, economic hardship, and limited awareness of its legal and health consequences. Although a majority of respondents (69.4%) expressed negative attitudes toward child marriage, a substantial minority remained supportive or neutral. Multivariate analysis revealed that low educational attainment, poverty, and poor knowledge of maternal and neonatal health risks were significant predictors of supportive attitudes, highlighting the role of structural and informational vulnerabilities. Cultural expectations, family pressure, and economic insecurity further reinforce these attitudes, underscoring the deeply rooted nature of the practice. Adolescent girls affected by child marriage continue to experience adverse outcomes, including obstructed labour, anaemia, low birthweight, preterm delivery, and disruption

of education. These findings emphasize that reducing child marriage requires comprehensive, context-specific interventions that go beyond awareness creation alone. Poverty alleviation, promotion of girls' education and school retention, and socio-economic empowerment are critical to addressing the underlying drivers. Community engagement particularly the involvement of traditional and religious leaders is essential to challenge harmful norms and influence household decision-making. Strengthened enforcement of existing laws, improved access to adolescent-friendly reproductive health services, and sustained community sensitization are also necessary. Collectively, these strategies can contribute to reducing child marriage, improving maternal and neonatal outcomes, and advancing the health, education, and rights of girls in Nsukka and similar settings.

CONTRIBUTION TO KNOWLEDGE

This study provides context-specific evidence on community knowledge, attitudes, and perceptions of child marriage in southern Nigeria. It demonstrates high general awareness but limited understanding of the legal minimum age and long-term maternal and neonatal risks, with nearly one-third of respondents holding supportive or neutral attitudes. Low education, poverty, and poor health knowledge were significant predictors of permissive attitudes. Qualitative insights highlight the role of socio-cultural norms, family expectations, and economic pressures in sustaining early marriage. By combining quantitative and qualitative approaches, the study links knowledge gaps to adverse health outcomes and provides a nuanced understanding of the social, economic, and health factors underpinning child marriage.

Table 6. Multivariate Predictors of Supportive Attitudes (N = 412)

Predictor	AOR	95% CI	p-value
Low education	2.64	1.41–4.92	0.002
Poverty	1.87	1.10–3.17	0.018
Poor knowledge	3.48	2.15–5.61	<0.001
Age < 25 years	1.22	0.67–2.22	0.507
Male sex	1.14	0.72–1.82	0.583

These findings provide evidence to guide context-sensitive, community-based interventions to reduce early marriage and improve maternal and neonatal health in Nsukka and similar settings.

FUNDING

The study received no external funding.

COMPETING INTEREST

The authors declare no competing interests.

AUTHORS' CONTRIBUTIONS

E.E.U., S.B.A., A.C.A., and C.W.A. made substantial contributions to the conception and design of the study, including development of the methodology. I.P.C., A.A.U., and C.O. contributed to data collection, data management, and statistical analysis. All authors were involved in drafting the manuscript, critically revising it for important intellectual content, and approving the final version for publication. All authors agree to be accountable for all aspects of the work and ensure the accuracy and integrity of the study.

ACKNOWLEDGEMENTS

The authors acknowledge Nwokike Gift and Okeke Stephanie for their assistance during data collection.

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