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A call for action: Experiences of Intimate Partner Violence among Pregnant Women attending Antenatal Clinics in Primary Health Centres in Kotangora, North-Central Nigeria

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Abstract

Context: Intimate Partner Violence (IPV) particularly during pregnancy is a significant global public health challenge that negatively impacts maternal and child health outcomes. Therefore, this study aimed to assess the prevalence, patterns, and determinants of IPV among pregnant women in Kotangora, North-Central Nigeria.

Materials and Methods: A descriptive cross-sectional study conducted among 441 pregnant women attending antenatal clinics in Primary Health Centres. Multistage sampling technique was used to select respondents and data were collected using a pretested semi-structured questionnaire. Data analysis was done at univariate, bivariate, and multivariate levels. Level of significance was set at $p < 0.05$.

Results: Prevalence of physical violence among the pregnant women was 84.1%. Patterns of physical abuse experienced by majority of the respondents 347, (78.7%) included hair pulling, being kicked 323, (73.2%) and 346, (78.5%) said their partners had tried to choke them. A significant proportion of the study participants 408, (92.5%) also reported experiencing sexual abuse by their husbands. The predictors of IPV among the pregnant women were age at marriage (p=0.006; OR: 4.293; 95% CI: 1.524 to 12.099), family setting (p=0.021; OR: 0.277; 95% CI: 0.094 to 0.1823), level of education (p=0.06; OR: 6.017; 95% CI: 0.927 to 39.052) and living with husband's relatives. (p=0.001; OR: 7.299; 95% CI: 2.353 to 22.648).

Conclusion: The high prevalence of IPV among pregnant women in Kotangora underscores the need for targeted interventions addressing socio-cultural factors. Incorporating routine IPV screening into antenatal care and implementing policy reforms focused on women's empowerment are crucial for improving maternal and child health outcomes.

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Introduction

Intimate Partner Violence (IPV), refers to physical, sexual, or psychological harm by a current or former partner and represents the commonest form of domestic violence. It is a global public health problem with profound implications for maternal and child health outcomes[1]. Globally, IPV data shows that this health problem occurs among different age groups, genders, sexual orientations, economic, or cultural backgrounds but studies have reported a high prevalence among women[2,3]. The World Health Organization (WHO) reports that approximately one in three women globally experience IPV in their lifetime, with pregnant women being particularly vulnerable due to their dependent status and physiological changes during pregnancy[4]. This translates to a global prevalence of 30% of women reporting physical and sexual violence in their lifetime[5]. According to a United Nations report, statistics from 87 countries, shows that an average of 1 in 5 women and girls under the age of 50 years will have experienced physical and/or sexual violence by an intimate partner within the last 12 months[6,7].

Higher prevalence rates of IPV of 39.7% was also reported in Sub-Saharan Africa (SSA) with a country-level prevalence of lifetime experience of IPV being highest in Sierra-Leone (60.0%) and lowest in Comoros (8.3%). Similarly, in Nigeria, 35.4% prevalence of a lifetime experience of IPV was documented showing a persistent violation of women' rights[8]. IPV during pregnancy is associated with a wide range of adverse maternal and neonatal outcomes, including miscarriage, preterm birth, low birth weight, and increased risk of perinatal morbidity and mortality[9,10]. Other well established health effects of physical and sexual violence among women includes, sexually transmitted disease, bruises, joint pain, dislocation, fracture, loss of vision, insecurity, and death[8].

Beyond physical harm, IPV significantly contributes to maternal mental health challenges such as depression, anxiety, sleep disturbances, eating disorders, suicidal ideation and homicide amongst others[10,11]. Studies in Tanzania and South Africa have reported strong associations between IPV and adverse pregnancy outcomes, particularly preterm birth and low birth weight[12,13]. These findings underscore IPV as a pervasive human rights violation with new patterns of violence against women evolving daily in our society. In Sub-Saharan Africa, the prevalence of IPV during pregnancy remains alarmingly high, reflecting the intersection of socio-economic, cultural, and gender inequality factors. A significantly higher proportion of IPV experienced by women in many African countries stems from wider societal acceptance of violence against women. Furthermore, younger age at marriage, low educational qualifications, poor job opportunities and low reproductive autonomy leads to partner high dependency rates and increases the odds of women suffering from IPV[5].

Achievement of Sustainable Development Goal (SDG) 5, especially target 5.2 in Sub-Saharan Africa particularly in Nigeria may not be on track despite some progress recorded by 2030. Thus, eliminating all forms of violence against women and girls including IPV still remains a pressing reproductive health concern in African settings[6,14]. Also, pregnancy period provides a unique screening opportunity for women who would regularly access health care during this time and may disclose IPV cases to trusted heath workers[15]. Existing studies from Nigeria have largely focused on IPV in relation to maternal health service utilization, highlighting how violence restricts women's ability to seek timely and adequate antenatal and maternity care[1,8,15]. However, there is limited data assessing IPV among pregnant women in rural North-Central Nigeria, where socio-cultural practices such as early marriage, polygamy, and extended family living patterns may exacerbate women's vulnerability to IPV.

With limited local evidence, interventions by policy makers and program planners to address IPV experiences by pregnant women in such communities may be poorly tailored. Therefore, this study seeks to address this gap by assessing the prevalence, patterns, and socio-demographic predictors of IPV among pregnant women in Kotangora, Niger State, North-Central Nigeria.

Materials and Methods

Study Area

Kotangora, town and traditional emirate, northwestern Niger state, western Nigeria, on the south bank of the Kotangora River. The town has several educational institutions, including primary

and secondary schools, as well as tertiary institutions such as the Federal college of Education (FCE) Kotangora and Niger State College of Nursing Sciences school of Midwifery Kotangora. There are also several healthcare facilities in the town, including hospitals and clinics, to cater to the health needs of the population.

Study Design

This was a descriptive cross-sectional study.

Study Population

This study was carried out among pregnant women in Kotangora local government area, Niger-state.

Inclusion criteria: Married pregnant women at least in the second trimester were recruited into the study.

Exclusion criteria: Pregnant women who were acutely ill during the period of data collection

Sample size determination and Sampling techniques

The minimum sample size was determined by the Cochran's formula (Z^2pq/e^2)[16,17]. With an acceptable margin of error of 5%, the calculated sample size was 420, after correcting an anticipated non-response rate of 10%, but 441 questionnaires were administered to further enhance representativeness.

A multistage sampling technique was used in the selection of respondents.

Stage 1: From the list of the 13 political wards in Kotangora Local Government Area of (LGA)[8] wards were chosen using simple random sampling (balloting method).

Stage 2: Two Primary health Centers (PHCs) were selected from each of the chosen wards using simple random sampling techniques by balloting method, making a total number of 16 health facilities.

Stage3: The list of the average monthly clinic attendance of pregnant women was obtained from the officer in charge in each of the respective health facilities. Proportional allocation was used to know the number of pregnant women accessing care to be interviewed in each of the sixteen selected health facilities. Systematic random sampling technique was used to select eligible respondents from each of the selected health facilities (with the sampling interval determined based on the number of pregnant attending the health facilities daily and the number of respondents to be selected each day from the patient daily list).

The first respondent in each facility used, was selected by simple random sampling through balloting method and subsequent respondents (every 4th respondent) was selected by using the sampling interval obtained from the patient daily lists. Selected eligible respondents were interviewed until the sample size is met and where the selected patient declines, the next client was chosen in replacement.

Study instrument and Pre-test of the Research Instrument

Data were collected through the use of an interviewer administered semi-structured questionnaire which was developed from a careful review of relevant literatures[18–20]. The questionnaire was pre-tested among 45 eligible respondents in Mokwa Local Government Area, Niger state. The responses provided helped to clarify instructions as well as modified questions or response categories where necessary.

Measurement of Outcome variables

The primary outcome variable for this study was IPV among pregnant women while the iindependent variables were the socio-demographic and socio-economic factors of the respondents.

Operational Definitions

Lifetime IPV: The women reported the experience of having one or more acts of physical or sexual violence by a current or former partner at any point in time[18,19].

Twelve months violence: The women reported physical or sexual violence by their partner in the last twelve months period[18,19].

Physical violence: The husband or co-habitant acting one of the six acts (something thrown to harm her, pushed, hit with a fist or something else to hurt her, kicked, drugged, burnt on purpose, perpetrator try to use or used gun, knife against her)[18,20].

Sexual violence: The husband or co-habitant acting one of the following three acts (forced sexual intercourse against her interest, sexual intercourse when she didn't want to due to being afraid of what he might do and she forced to do something sexual that she perceives as humiliating)[18,20].

Emotional violence: If the participant says yes for one of the following. Her partner insulted or made her to feel bad about one self, humiliated her in front of others, intimidated or scared her on purpose, or threatened her with harm[18,20].

Data Analysis

After the administration of questionnaires, the collected data was manually sorted and entered into a computer. The analysis was conducted using IBM Statistical Product for Service Solution (SPSS) version 26.0. The data analysis encompassed univariate, bivariate, and multivariate analysis. The univariate level results were presented using frequency distribution tables, graphs, and charts.

At the bivariate level, associations between categorical variables were assessed utilizing the Pearson Chi-square test. The multivariate analysis involved using binary logistic regression to ascertain the determinants of intimate partner violence and utilization of reproductive services among pregnant women. The level of significance was set at a p-value less than 0.05. In the bivariate analysis, independent associations between each dependent variable and the outcome variable were tested, and only those showing statistical significance at $p < 0.05$ were subjected to a multivariate logistic regression model.

Ethical considerations

Ethical clearance was obtained from the research ethical review committee of the State Ministry of Health, Minna, with protocol number NSMOH/ERC PIN/2023/13/07. Permission to conduct the study was obtained from the PHC Coordinators in Kotangora LGA. Informed consent was taken from each participant after an adequate explanation of the objectives of the study and the benefits of the study. Respondents were informed that participation was voluntary, and confidentiality and data security were assured.

Results

There were more respondents in the age groups 30 years and above representing 195 (44.2%) compared to age groups < 20, and 20– 49 with 87 (19.7%), and 159 (36.1%) respectively. Most of the respondents were from the Hausa/Fulani 367 (83.2%) ethnic group and 227 (51.5%) of the respondents had secondary education with 199 (45.1%) unemployed. Three hundred and thirty-seven respondents (76.4%) married before 20 years of age. About 281, (63.7%) chose their husband themselves and 117 (26.5%) lived with their husband's relatives. (Table 1)

Table 1: Socio-demographic characteristics of pregnant women attending antenatal clinics in Kontagora Local Government Area, Niger State. (N= 441)

Socio-demographic variables	Frequency	Percentage(%)
Age groups (in years)		
< 20	87	19.7
20-29	159	36.1
30 years and above	195	44.2
Mean age	27.05 ± 7.19	
Age at marriage		
< 20 years	337	76.4
20 years and above	104	23.6
Mean	18.78 ± 2.78	
Ethnicity		
Hausa/Fulani	367	83.2
Yoruba	45	10.2
Others	29	6.6
Education status		
No formal education	92	20.9
Primary	58	13.2
Secondary	227	51.5
Higher	64	14.5
Occupation		
Unemployed	199	45.1
Skilled	91	20.6
Semi-skilled	145	32.9
Unskilled	6	1.4
Religion		
Christianity	20	4.5
Islam	413	93.7
Traditional	8	1.8
Family setting		
Monogamous	144	32.7
Polygamous	297	67.3
Chose current husband by yourself	281	63.7
Yes	160	36.3
No		
Who chose husband for you?(N=160)	137	31.1
Parents	5	1.1
Close relatives	6	1.4
Husband's parents	1	0.2
Don't remember	11	2.5
Others		
Live with husband's relatives		
Yes	117	26.5
No	324	73.5

Prevalence and patterns of physical and sexual violence among pregnant women in this study showed that most of the respondents 371(84.1%) and 408, (92.5%) had ever experienced physical and sexual abused by their husbands respectively. One hundred and twenty (27.2%) had been physically abused by their husbands during previous pregnancies, while 37, (8.4%) had been physically abused by their husband in the current

pregnancy. Regarding acts of physical abuse experienced by the respondents, majority 347 (78.7%) reported that their hairs had been pulled, 323 (73.2%) were kicked and 346, (78.5%) said their partners had tried to choke them. Out of the 408 (92.5%) correspondents who had ever experienced sexual abuse, few of them 30 (6.8%) had been sexually abused by their husbands in this current pregnancy. Concerning forms of sexual violence, 404 (99.0%) had been forced to have sexual intercourse, and 4 (1.0%) had been forced to perform other sexual acts they considered degrading/ humiliating. (Table 2)

Table 2: Prevalence and Patterns of Physical and Sexual Violence among pregnant women attending antenatal clinics in Kontagora Local government Area, Niger State (N = 441)

Variables	Frequency	Percentage (%)
Ever been physically abused by your husband		
Yes	371	84.1
No	70	15.9
Ever been physically abused by your husband while pregnant		
Yes	120	27.2
No	321	72.8
Ever been physically abused by your husband in this current pregnancy		
Yes	37	8.4
No	404	91.6
aForms of Physical Violence (n=371)		
Slapped	40	9.1
Pushed	6	1.4
Threw something	27	6.1
Twisted arm	3	0.7
Pulled hair	347	78.7
Kicked	323	73.2
Tried to choke me	346	78.5
Beat me up	8	1.8
Dragged on floor	26	5.9
Threatened with knife	2	0.5
Insulted and made to feel bad about yourself	78	17.7
Belittled/humiliated before others	10	2.3
Ever been sexually abused by your husband		
Yes	408	92.5
No	33	7.5
Ever been sexually abused by your husband while pregnant		
Yes	333	75.5
No	108	24.5
Ever been sexually abused by your husband during current pregnancy		
Yes	30	6.8
No	411	93.2
aForms of Sexual Violence (n=408)		
Partner forced you to have sex	404	99.0
Partner forced you to perform other sexual acts you considered degrading/ humiliating	4	1.0

[a]Multiple responses allowed

Most of the respondents 405 (91.8%) had been injured as a result of the physical or sexual assault by their husband and 325 (73.7%) had been injured many times. In the distribution, 403 (91.4%) had been injured in the past 12 months by their husband. Regarding types of injuries sustained, 324 (73.5%) had cuts/punches/bites, followed by eye injury 220 (50.1%) and ear injury 220 (49.9%). Most of the respondents who had injuries 195 (48.5%) said that they managed the wounds sustained during physical assault on their own, 136 (33.8%) said it required medical treatment and 54 (13.4%) said it required hospital admission. (Table 3)

Table 3: Injuries from Intimate Partner Violence among pregnant women attending antenatal clinics in Kontagora Local government Area, Niger State (N = 441).

Variables	Frequency	Percentage
Ever been injured as a result of these physical or sexual assault by your husband		
Yes	405	91.8
No	34	7.7
I can't remember	2	0.5
Number of times injured		
Once	78	17.7
Twice	38	8.6
Many times	325	73.7
Ever been injured in the past 12 months		
Yes	403	91.4
No	34	7.7
I can't remember	2	0.5
aTypes of injuries sustained after the assault (n = 405)		
Cuts/punches/bites	324	73.5
Scratch/abrasion/bruises	6	1.4
Sprains	51	11.6
Dislocation	19	4.3
Fractures	1	0.2
Burns	2	0.5
Penetrating injury	0	0
Deep cuts	0	0
Gashes	0	0
Eye injury	220	50.1
Ear injury	220	49.9
Broken teeth	1	0.2
Loss of consciousness	6	1.4
I can't remember	2	0.5
Other injury	0	0
Seriousness of Injury (n = 405)		
Required hospital admission	54	13.4
Required medical treatment	136	33.8
Managed wound on my own	195	48.5

[a]Multiple responses allowed

At bivariate level, age was significantly associated with IPV (p = 0.022), such that those who were 30 years and above were more likely to experience IPV. Age at marriage was also significantly associated with IPV (p = 0.009), such that those that were married less than 20 years were more likely to experience IPV. Educational status was significantly associated with IPV (p=0.005), such that those that were poorly educated were more likely to experience IPV. Also, religion had a statistically significant association with IPV (p=0.042) such that those that practiced Islam were

likely to experience IPV. Family settings also had a statistically significant association with IPV (p = 0.001) such that those from polygamous family settings were more likely to experience IPV. Other socio-demographic variables had no statistically significant association (p > 0.05) with IPV.

Also, choosing husbands by themselves had a statistically significant association with IPV (p < 0.001) such that those that chose their husbands themselves were less likely to experience IPV. Living with husband's relatives was significantly associated with IPV (p = 0.025) such that those that lived with their husband's relatives were more likely to experience IPV. Other variables had no significant association (p > 0.05) with IPV. (Table 4)

Table 4: Association between socio-demographic characteristics and IPV among pregnant women attending antenatal clinics in Kotangora Local Government Area, Niger State.

Variables	Experienced IPV		Statistics
	Yes	No	
Age			$\chi2 = 7.623$
<20 years	74 (85.1)	13 (14.9)	df = 2
20-29 years	124 (78.0)	35 (22.0)	p 0.022*
30 years and above	173 (88.7)	22 (11.3)	
Age at Marriage			$\chi2 = 6.795$
< 20 years	292 (86.6)	45 (13.4)	df= 1
20 years and above	79 (76.0)	25 (24.0)	p=0.009*
Ethnicity			
Hausa/Fulani	312 (85.0)	55 (15.0)	$\chi2 = 1.822$
Yoruba	37 (82.2)	8 (17.8)	df 2
Others	22 (75.9)	7 (24.1)	p = 0.402
Educational status			$\chi2$ 12.919
Illiterate	84 (91.3)	8 (8.7)	df = 3
Primary	50 (86.2)	8 (13.8)	p 0.005*
Secondary	192 (84.6)	35 (15.4)	
Higher	45 (70.3)	19 (29.7)	
Occupation			$\chi2 = 5.310$
Unemployed	174 (87.4)	25 (12.6)	df = 3
Skilled	76 (83.5)	15 (16.5)	p = 0.150
Semi-skilled	115 (79.3)	30 (20.7)	
Unskilled	6 (100.0)	0 (0.0)	
Religion			$\chi2 = 6.355$
Christianity	13 (65.0)	7 (35.0)	df 2
Islam	352 (85.2)	61 (14.8)	p = 0.042*
Traditional	6 (75.0)	2 (25.0)	
Family setting			$\chi2 = 11.386$
Monogamous	109 (75.7)	35 (24.3)	df = 3
Polygamous	262 (88.2)	35 (11.6)	p = 0.001*
Chose husband by yourself			$\chi2 = 13.183$
Yes	223 (79.4)	58 (20.6)	df= 1
No	148 (92.5)	12 (7.5)	p<0.001*
Who chose husband (N=160)			$\chi2 = 2.178$
Parents	125 (91.2)	12 (8.8)	df= 4
Close relatives	5 (100.0)	0 (0.0)	p 0.703
Husband's parents	6 (100.0)	0 (0.0)	
Don't remember	1 (100.0)	0 (0.0)	
Others	11 (100.0)	0 (0.0)	
Lives with husband's relatives			$\chi2 = 4.994$
Yes	106 (90.6)	11 (9.4)	df= 1
No	265 (81.8)	59 (18.2)	*p=0.025

** Statistically significant; χ2- Chi-squared test; df – degree of freedom; p = p-value*

At multivariate levels, after controlling for confounders, the predictors of IPV among pregnant women were; age at marriage (p=0.006; OR: 4.293; 95% CI: 1.524 to 12.099), having primary education (p=0.06; OR: 6.017; 95% CI: 0.927 to 39.052), being from monogamous family setting (p=0.021; OR: 0.277; 95% CI: 0.094 to 0.1823), and living with husband's relatives (p=0.001; OR: 7.299; 95% CI: 2.353 to 22.648), remained statistically significant. It was such that those pregnant women who married at less than 20 years of age were 4 times more likely to experience IPV. Study participants who had only primary education had 6 times higher odds of IPV compared to those who had higher than secondary school education. Those from monogamous family settings had 73% lesser odds experiencing IPV compared to those from polygamous settings. Additionally, those who lived with their husband's relatives had 7 times higher odds of experiencing IPV compared to others. (Table 5).

Table 5: Predictors of IPV among pregnant women attending antenatal clinics in Kontagora Local government Area, Niger State using binary logistic Regression

Variables	p-value	AOR	95% CI	
			Lower	Upper
Age groups (in years)				
< 20	0.554	1.563	0.356	6.863
20-29	0.602	1.335	0.451	3.957
30 years and above (R)				
Age at marriage				
< 20 years	0.006*	4.293	1.524	12.099
20 years and above (R)				
Education status				
Illiterate	0.125	5.316	0.629	44.93
Primary	0.06*	6.017	0.927	39.052
Secondary	0.902	1.103	0.233	5.228
Higher (R)				
Education status of Spouse				
Illiterate	0.25	0.409	0.089	1.877
Primary	0.69	0.56	0.032	9.684
Secondary	0.15	0.374	0.098	1.428
Higher (R)				
Family setting				
Monogamous	0.021*	0.277	0.094	0.823
Polygamous (R)				
Chose husband by self				
Yes	0.072	0.264	0.062	1.127
No (R)	0.221	2.451	0.583	10.303
Lives with husband's relatives				
Yes	0.001*	7.299	2.353	22.648
No (R)				

*R – Reference value; *Statistically significant; AOR – Adjusted odds ratio; CI – confidence interval*

Discussion

This study highlights the high prevalence of intimate partner violence (IPV) among pregnant women attending antenatal clinics in Kotangora Local Government Area, Niger State. A lifetime prevalence of 84.1% was reported by respondents in this study. Majority of the women had experienced physical violence, such as hair-pulling, kicking, and choking, while over a quarter, 27.2% had been abused during previous pregnancies by their husbands. These findings align with previous studies indicating IPV during pregnancy as a significant public health problem[21,22]. However, the prevalence of IPV in this study is notably higher than the 41.94% reported in a similar study across 23 sub-Saharan African countries[21]. Similarly, our result was also higher than a lifetime prevalence of 72% reported in a study conducted in Oyo State, South west Nigeria, among pregnant women[15]. This discrepancy may be attributed to the more localized nature of the current study as well as the differences in the socio-cultural contexts of our study location. The higher IPV prevalence in this study may also reflect the unique challenges faced by pregnant women in Kotangora, where IPV is more prevalent but underreported.

About a quarter of the respondents disclosed experiencing physical abuse during their previous pregnancies, with 8.4% reporting abuse during the current pregnancy, suggesting that the violence may negatively impact both maternal and foetal outcomes if urgent actions are not taken. This finding is consistent with studies indicating that IPV tends to intensify as pregnancies progress, often due to economic dependence, social pressures, or fear of retaliation from the abuser[20,23]. Additionally, a study in Tanzania highlighted that physical abuse during pregnancy is often underreported, due to fear of stigma and lack of adequate support systems, indicating that the actual prevalence may be higher than reported in this study[12]. Regarding sexual violence, almost all respondents reported being coerced into sexual intercourse, while 1.0% were forced to perform other humiliating sexual acts. These results mirror findings from South Africa, where sexual violence, including forced intercourse, was common among pregnant women experiencing IPV[13]. Forced sexual intercourse during pregnancy is particularly damaging, stripping women of their self-esteem and autonomy over their bodies at a vulnerable period. The psychological consequences of IPV, including depression, anxiety, and post-traumatic stress disorder (PTSD), are profound and well established[24]. The disruption of emotional and psychological well-being due to IPV may also extend beyond the immediate aftermath of the abuse, affecting long-term maternal mental health and social relationships. The trauma experienced during pregnancy may influence maternal-infant bonding and child development, underscoring the urgent need for intervention and support systems.

One-third of the respondents required medical treatment for their injuries, while 10% needed hospitalization. However, a significant portion of women (50%) chose to self-manage their injuries. This suggests that many IPV victims lack access to proper healthcare or fear seeking medical help due to social stigma or lack of trust in healthcare providers[25]. These women are also more likely to experience long-term physical and mental health problems, including chronic pain, depression, and anxiety[26]. Furthermore, IPV during pregnancy is associated with complications such as preterm birth, low birth weight, and postpartum depression[27]. The need for hospital admission due to untreated injuries further underscores the importance of integrating IPV screening into routine antenatal care.[28].

This study found that women aged 30 years and above were more likely to experience IPV, and this finding is in tandem with results from previous studies conducted in Tanzania and Ethiopia. Older women, particularly those in long-term relationships, are often more vulnerable to IPV due to prolonged exposure to abusive marital relationships and societal norms that normalize such violence[12,29]. Additionally, early marriage was a significant predictor of IPV, with women married before 20 being four times more likely to experience IPV during pregnancy compared to those married later. This finding aligns with studies in sub-Saharan Africa that identify early marriage as a key risk factor for IPV, often due to limited autonomy, economic dependence, and early exposure to marital power dynamics[30]. The predominance of women from the Hausa/Fulani ethnic group in this study suggests that cultural norms and practices within this community may contribute to the higher

prevalence of IPV. Traditional gender roles within such communities may perpetuate violence, placing women at greater risk[13]. Furthermore, family setting emerged as a significant predictor, with women in monogamous family settings being seven times less likely to experience IPV than those in polygamous relationships. This finding aligns with studies indicating that polygamous marriages often create power imbalances, fostering environments where IPV is more likely[31].

Education also emerged as a significant factor, with respondents having only primary education being six times more likely to experience IPV compared to those with secondary or higher education. This highlights the role of education in empowering women, as lack of education limits their understanding of their rights and available health resources for IPV survivors[24]. Studies have shown that women with higher levels of education may be better equipped to recognize abusive behaviors, seek help, and navigate systems that provide support[29,32]. Furthermore, education can empower women to challenge power dynamics in relationships and promote healthier marital decisions. However, autonomy alone does not guarantee an absence of IPV, as socio-cultural and economic factors still play a significant role in IPV dynamics[28]. Finally, women living with their husband's relatives had seven times higher odds of experiencing IPV. Extended family dynamics, particularly in patriarchal settings, often disadvantage women, as these living arrangements reinforce gender roles and family hierarchies that can escalate IPV risk[33]. These findings underscore the complex interplay of socio-cultural, economic, and familial factors contributing to IPV during pregnancy.

Limitations: IPV is often underreported due to stigma and fear of retribution, potentially leading to an underestimation of its prevalence. Furthermore, the cross-sectional design of the study also limits the ability to assess changes in IPV over the course of pregnancy or its long-term effects on the victims.

Conclusion: This study found a high prevalence of IPV among pregnant women in Kotangora. Age at marriage, family setting, lower level of education and living with husband's relatives were significant predictors of intimate partner violence during current pregnancy. The findings emphasize the need for integrating IPV screening into routine antenatal care and the training of healthcare providers to identify and address IPV. Public health campaigns should also be done consistently to increase the awareness about IPV, to reduce stigma and encourage survivors to seek help. In addition, policy interventions should focus on preventing IPV, providing social support, and ensuring access to mental health services for survivors.

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Conflict of interest

The authors declare no conflict of interest associated with this manuscript

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