



“As I dropped the phone, she slapped me for the first time”: experiences of intimate partner violence among Nigerian men during COVID-19 restrictions

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Abstract

Limited literature exists on men’s experiences with intimate partner violence (IPV) during the COVID-19 lockdown, especially in resource-constrained settings such as Nigeria. We investigated the prevalence, risk factors, and lifetime experiences of IPV among men in Nigeria during COVID-19 restrictions. Using a mixed methods design, we interviewed 420 married men with a structured questionnaire and conducted 20 in-depth interviews. Logistic regression and a framework approach were used for data analysis. Approximately 86.4% of respondents ($n = 363$) experienced IPV at some point in their lifetime. The prevalence of IPV during the COVID-19 restrictions was 76.2% ($n = 320$). Over a lifetime, verbal (67.4%), physical (78.1%), and sexual coercion (81.0%) were the most common forms of IPV. During the COVID-19 lockdown, the corresponding proportions were 48.6%, 69.5%, and 57.4%, respectively. Male- and female-perpetrated IPV over a lifetime (88.3% vs 87.6%) and during COVID-19 restrictions (88.3% vs 81.4%) were similar ($p > 0.05$). Older age, non-Muslim religion, longer marital duration, partner’s profession, and no formal education were associated with higher IPV risk. Home confinement, financial stress, childbirth, disrespect toward spouse’s parents, emotional detachment, disputes about child discipline, and suspected infidelity contributed to IPV. Men’s active involvement in family life, improved communication, and increased transparency emerged as protective factors. Our findings highlight the high rates of IPV during the pandemic, with men as both perpetrators and victims. Future epidemic preparedness plans should prioritize IPV prevention strategies that enhance partner communication, promote male involvement in family life, address the gender education gap, and provide support services.

Keywords Intimate partner violence · COVID-19 · Nigeria · Male perspectives

Introduction

Intimate partner violence (IPV) encompasses a spectrum of harmful behaviors within intimate relationships, leading to physical, sexual, or psychological harm (WHO, 2016). These behaviors, such as physical aggression, sexual coercion, stalking, psychological abuse, and technology-enabled control, involve both current and former partners (Breiding et al., 2014). Globally, an estimated 27% of ever-partnered women of reproductive age have encountered physical and/or sexual violence at least once in their lifetime (Sardinha et al., 2022). The overall global prevalence of any IPV is 34.8%, with subtypes breakdown: physical abuse (29.7%), sexual abuse (14.9%), psychological abuse (35.1%), financial abuse (26.0%), and multiple types

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(26.4%). Gender-specific patterns are evident, with rates against women at 36.1% and against men at 28.8% (Breckenridge et al., 2019).

A comprehensive review of IPV during the COVID-19 pandemic revealed a global prevalence of 31%, with higher rates in developing regions (33%) and substantial variations between countries, such as Uganda (68%) and the USA (10%) (Kifle et al., 2024). Divergent findings emerged in reviews assessing the impact of the COVID-19 pandemic on IPV prevalence. While one review indicated no significant change compared to pre-pandemic estimates (Costa et al., 2024), others presented conflicting perspectives (Bazyar et al., 2021). Despite a generally steady IPV prevalence before and during COVID-19 (15.1% and 16.2%, respectively), Peitzmeier et al. (2022) highlighted increased severity and new cases, particularly impacting essential workers, pregnant individuals, those facing economic challenges, the unemployed/underemployed, individuals with partners undergoing employment changes, and those testing positive for COVID-19, underscoring concentrated effects within marginalized groups (Hong et al., 2023).

IPV is a complex social phenomenon deeply rooted in gender dynamics, necessitating a comprehensive framework for analysis through a gender lens, acknowledging the interconnectedness of individual, household/family, community, and institutional/policy factors (Almeida et al., 2023). The effects of the COVID-19 pandemic, such as increased stress, anxiety, and economic hardship, may intensify individual-level factors such as mental health, substance use, and past experiences of trauma with recognized influence on an individual's propensity to engage in violent behavior. At the family unit level, relationship dynamics, communication patterns, and shared responsibilities are crucial. The influence of intergenerational transmission of violence the impact of witnessing or experiencing violence during childhood (Levendosky & Graham-Bermann, 2001), could be exacerbated by household-level stressors during the COVID-19 pandemic, especially during lockdowns and the accompanying economic uncertainties leading to heightened tensions within families. At the community level, the pandemic may impact community-level resources, accessibility to support services, and community norms surrounding crisis response. Finally, the unintended consequences of pandemic response strategies, including disruptions in service delivery and altered institutional priorities, may affect IPV prevention efforts.

Reports from various regions, including Nigeria, indicate a pandemic-related escalation of IPV (Moreira & Pinto da Costa, 2020; Fawole et al., 2021; Lyons & Brewer, 2022). However, studies focusing on men's perspectives in this context are limited. This omission is significant, hindering the involvement of men in violence prevention efforts and advocacy (Kolbe & Büttner, 2020). To address this gap in

the literature and build upon existing knowledge, it is essential to understand the unique experiences of men during COVID-19 restrictions, particularly in resource-constrained settings such as Nigeria. Therefore, this community-based study aims to explore the prevalence, predictors, and experiences of IPV among couples from a men's perspective during COVID-19 restrictions in Kano, northern Nigeria.

Methods

Participants

This study was conducted in Tarauni and Nassarawa local government areas (LGAs) of metropolitan Kano, northern Nigeria. The residents are mainly of Hausa-Fulani ethnicity and engage in trading, entrepreneurship, civil service, farming, and homemaking. The study focused on married men residing in Kano, excluding visitors and individuals who were unable or unwilling to provide consent.

Out of the 430 eligible men approached, 97.7% ($n = 420$) completed the interviews. The mean age (\pm standard deviation) of the respondents was 39.6 ± 10.73 years. Most of the respondents identified as Hausa-Fulani (79.1%) and practiced Islam (82.9%). The majority of respondents (80.7%) and their spouses (79.1%) had at least a secondary education. A small percentage of respondents reported alcohol use (6.4%) and substance use (4.5%).

Materials and procedures

This community-based, cross-sectional study utilized a mixed methods approach involving a questionnaire survey and in-depth interviews. The qualitative component offered a detailed exploration of men's experiences of interpersonal violence prior to and during the COVID-19 restrictions. The study adopted a pragmatic epistemological stance, combining a post-positivist paradigm for the questionnaire survey and an interpretivist/constructivist paradigm for the qualitative component (Henderson, 2011; Kaushik & Walsh, 2019). Power analysis utilized Fisher's formula (Lwanga & Lemeshow, 1991) and was based on the following assumptions: a prevalence of IPV against men of 52.4% (Malik & Nadda, 2019), a confidence level of 95%, and a margin of error of 5%. This resulted in a minimum sample size of 384. To account for non-response, the sample size was increased by 10% and rounded up to 430.

We employed a multistage sampling approach for participant selection. In the first stage, we randomly sampled half of the ten wards in each of the two LGAs using a simple ballot. In the second stage, we chose one settlement from each sampled ward using the same method. Then, we assigned numbers to the selected settlements. After enumerating

households, we determined a sampling interval. Within each settlement, we used the systematic sampling method to select respondents. We selected the first household by employing simple random sampling between one and the settlement's sampling interval. To identify subsequent households, we added the sampling interval to the serial number of the previous household. Finally, we provided a detailed explanation of the study to eligible men within each selected household and obtained their consent to participate.

We used the validated revised conflicts tactics scales (CTS-2) (Straus & Douglas, 2004) for the survey, previously used in this setting (Okenwa et al., 2009). The CTS-2 tool measures the extent of psychological and physical attacks between partners, as well as their use of reasoning or negotiation during conflicts. We focused on the sections related to married partners and questions regarding what the intimate female partner did to the respondent. We adapted the CTS-2 to include questions on physical assault, psychological aggression, and sexual coercion. The adapted survey included sections for socio-demographic data (Section A) and information on the prevalence, types, and perpetrators of IPV (Section B). Examples of questions included: Did your partner do any of the following things to you ever/in the past year of COVID-19 restrictions? (a) insulted or swore or shouted or yelled at you; (b) pushed, shoved, or slapped you; (c) punched or kicked or beat you up; (d) destroyed something belonging to you or threatened to hit you; (e) used force (hitting or holding down, to make you have sex); (f) insisted on sex when you did not want to, or insisted on sex without a condom? The respondent was also asked if they did the same to their partner during the two periods. Participants were asked to rate the frequency of specific events using the following categories over their lifetime: 0 = the event never occurred, 1 = a single occurrence, 2 = indicated twice, and 3 = three or more instances. The same scale applied to events during the COVID-19 pandemic lockdown.

To enhance our understanding of the survey findings, the qualitative interviews employed an open-ended interview guide with probes to encourage detailed descriptions. The participants were asked about their encounters with physical assault, threats, humiliation, or intimidation by their partner or partners, both before and during the lockdown. The interview explored the details of participants' experiences in abusive relationships, examining the onset, underlying causes, nature of abuse, typical incidents, and the most severe events. Additionally, participants were questioned about the current status of the abuse and whether there were variations in violence between pre- and post-lockdown periods. The second part of the interview focused on participants' efforts to seek help. They were prompted to discuss whether they confided in friends or family, contacted support groups or online communities, and if they ever involved law enforcement. Written or thumb-printed informed consent

was obtained from all participants, ensuring their voluntary participation. Confidentiality in reporting the qualitative findings was maintained by removing any identifying information.

The study protocol received approval from the Kano State Ministry of Health Research Ethics Committee. Potential participants were individually contacted beforehand, and detailed information about the study was provided. We sought their consent and scheduled interviews at a time and place convenient for them. This approach aimed to establish trust and ensure the comfort of participants during the confidential interviews. Out of the 430 sampled men, 10 chose to withhold consent during the initial contact phase, and as a result, they were excluded from the study. Trained research assistants used the local Hausa language to inform eligible men in the selected households about the study's objectives, eligibility criteria, sampling process, and procedures. Participants were assured that their involvement was voluntary and that declining to participate would have no consequences. Consent was obtained through signed forms from literate men and thumbprints from non-literate individuals. Face-to-face interviews were conducted in participants' homes or in other preferred locations, adhering to recommended COVID-19 precautions and ensuring privacy. Supervisors checked and verified completed questionnaires in the field. Data clerks independently entered the information from the questionnaires into a password-protected database at Aminu Kano Teaching Hospital. The research staff received training on establishing rapport, obtaining informed consent, protecting research participants, and conducting interviews.

Field workers, recruited from male medical students, underwent training and supervision by ZI, TA, LS, and FT. Ten potential participants declined participation, citing time constraints and lack of interest. The timing and location of the interviews were determined based on participants' preferences, mostly conducted at their homes, in front of their houses, or at a nearby health facility away from their spouses. Qualitative interviews were conducted by ZI and LS in similar locations, respecting the participants' preferences.

Statistical analysis

Data analysis was conducted using SPSS version 22 (IBM Corp., Armonk, NY). Numeric data were summarized using mean and standard deviation, while categorical variables were presented as frequencies and percentages. The prevalence of IPV among couples, both male-perpetrated and female-perpetrated, was calculated for lifetime and during the COVID-19 restrictions. Associations between sociodemographic characteristics, lifetime substance/drug use and alcohol use, cigarette smoking, marital attributes, partner's characteristics, and the primary outcomes (IPV during the

COVID-19 lockdown and lifetime) were assessed using Pearson's chi-square or Fisher's exact test, as appropriate (Kim, 2017). A significance level of 5% was applied to all tests. Binary logistic regression models were constructed for each outcome, including independent variables with a p value < 0.10 at the bivariate level. We employed binary logistic regression models separately for two key aspects of IPV. The first model focused on respondents' experiences during the COVID-19 lockdown, coded as no = 0 for the absence and yes = 1 for the presence of IPV (those indicating 1, 2, 3, or more episodes of IPV). The second model explored the lifetime ever occurrence of IPV, also utilizing binary coding no = 0 for the absence and yes = 1 for the presence of IPV (those indicating 1, 2, 3, or more episodes of IPV). The strength and direction of predictors were measured using adjusted odds ratios (aORs) with corresponding 95% confidence intervals (CIs). Model fitness was assessed using the Hosmer–Lemeshow statistic and Omnibus tests, with a p value > 0.05 for the Hosmer–Lemeshow chi-square indicating a good fit.

Qualitative data analysis

Qualitative interviews were recorded and transcribed verbatim. Thematic analysis was conducted using the framework approach (Pope et al., 2000), involving repeated reading for familiarization, coding, theme generation, application of codes to the transcripts, matrix formation, and interpretation. The findings from the qualitative component were integrated with the quantitative data to provide a comprehensive understanding of the findings (Table 1).

Results

The majority of respondents (86.4%, $n = 363$) reported experiencing IPV at some point in their lives, with a prevalence of 76.2% ($n = 320$) during the COVID-19 restrictions ($p < 0.05$) (Table 2). Verbal altercations were lifetime-reported by 67.4% ($n = 283$) of couples, physical violence by 78.1% ($n = 328$), and sexual coercion by 81.0% ($n = 340$), compared to 48.6% ($n = 204$), 69.5% ($n = 292$), and 57.4% ($n = 241$) during the COVID-19 restrictions, respectively ($p < 0.05$). The lifetime prevalence of a combination of verbal and physical violence (47.9%, $n = 201$) and combined verbal, physical, and sexual coercion 42.1% ($n = 177$) were higher than the corresponding prevalence of 42.4% ($n = 178$) and 39.8% ($n = 167$) during the COVID-19 restrictions ($p < 0.05$).

Regarding IPV perpetration, the lifetime prevalence by men (88.3%, $n = 371$) was similar to that by women (87.6%, $n = 368$) ($p > 0.05$). Specifically, 68.3% ($n = 287$) of men and 63.3% ($n = 266$) of women were reported to have physically

Table 1 Sociodemographic characteristics of male respondents and partners, Kano, Nigeria, 2022

Characteristics	Frequency No. (%) <i>N</i> = 420
Age group	
20–29	79 (18.8)
30–39	139 (33.1)
40–49	117 (27.9)
≥ 50	85 (20.2)
Ethnicity	
Hausa	236 (56.2)
Fulani	96 (22.9)
Others	88 (20.9)
Religion	
Islam	348 (82.9)
Christianity	72 (17.1)
Marriage type	
Monogamous	326 (77.6)
Polygamous	94 (22.4)
Duration since first marriage (years)	
< 5	163 (38.8)
5–9	84 (20.0)
≥ 10	173 (41.2)
Education	
No formal	51 (12.1)
Primary	30 (7.1)
Secondary	152 (36.2)
Tertiary	187 (44.5)
Occupation	
Unemployed	30 (7.1)
Farmer	51 (12.1)
Civil servant	134 (31.9)
Business/trading	196 (46.7)
Others	9 (2.1)
Monthly income	
< 30,000	86 (20.5)
≥ 30,000	334 (79.5)
Alcohol use	
Yes	27 (6.4)
No	393 (93.6)
Drug/Substance use	
Yes	19 (4.5)
No	401 (95.5)
Spouse's education	
No formal	55 (13.1)
Primary	33 (7.9)
Secondary	183 (43.6)
Post-secondary	149 (35.5)
Spouse's occupation	
Homemaker	116 (27.6)
Petty trading/farming	153 (36.4)

Table 1 (continued)

Characteristics	Frequency No. (%) N = 420
Seamstress	34 (8.1)
Civil servant	22 (5.2)
Others	95 (22.6)

assaulted their partners, while 77.1% ($n = 292$) of men and 60.7% ($n = 255$) of women engaged in sexual coercion. During the COVID-19 restrictions, the proportion of men (88.3%, $n = 371$) and women (87.6%, $n = 368$) perpetrating IPV was also similar ($p > 0.05$). The prevalence of male-perpetrated physical assault (46.7%, $n = 196$) and female-perpetrated physical assault (46.2%, $n = 194$) during the COVID-19 lockdown was similar, as well as male-perpetrated sexual coercion (42.4%, $n = 178$) and female-perpetrated sexual coercion (43.6%, $n = 183$) ($p > 0.05$).

Predictors of IPV in the year of COVID-19 restrictions

At the bivariate level, IPV during the year of COVID-19 restrictions was associated with the respondent's age, religion, marital duration, education, and spousal occupation ($p < 0.05$). These same factors remained independent predictors of IPV at the multivariate level. Compared to respondents aged below 20 years, those in the 40–49 years and ≥ 50 years age groups had a twofold [adjusted odds ratio (aOR) 2.01; 95% confidence interval (CI) 1.14–4.75] and 57% (aOR 1.57, 95% CI 1.12–4.67) increased likelihood of experiencing IPV. Non-Muslim respondents had a twofold (aOR 2.32, 95% CI 1.13–6.92) increased likelihood of encountering IPV compared to Muslim respondents. Respondents married for longer periods (≥ 5 years) were three times (aOR 3.37, 95% CI 1.64–6.92) as likely to experience IPV. Those with primary or no formal education had twofold (aOR 2.11, 95% CI 1.13–5.75) and 58% (aOR 1.58, 95% CI 1.12–4.76) increased likelihood of reporting IPV, respectively, compared to those with at least secondary education. Finally, men whose spouses were civil servants and petty traders/businesswomen had two- (aOR 2.04, 95% CI 1.16–6.01) and sevenfold (aOR 7.44, 95% CI 2.73–20.28) increased likelihood of experiencing IPV, respectively, relative to those whose partners were homemakers (Table 3).

Predictors of IPV over a lifetime

In predicting lifetime IPV occurrence, similar factors were observed at the bivariate level, except for age and religion. However, at the multivariate level, marital duration, education, and spousal occupation emerged as independent predictors. Respondents married for longer periods (≥ 5 years)

had a twofold increased likelihood of encountering IPV (aOR 2.38, 95% CI 1.21–4.66). Those with primary or no formal education had twofold (aOR 2.01, 95% CI 1.12–4.66) and 64% (aOR 1.64, 95% CI 1.11–3.88) increased odds of experiencing IPV, respectively, compared to those with at least secondary education. Further, men whose spouses were civil servants, traders, and businesswomen had two- (aOR 2.29, 95% CI 1.17–7.20), four- (aOR 3.90, 95% CI 1.73–8.82), and sixfold (aOR 6.29, 95% CI 1.18–49.45) elevated odds of experiencing IPV over their lifetime, respectively, relative to those whose partners were homemakers (Table 4).

Qualitative findings

The experiences of IPV were thematically organized into several key domains: pre-existing violence, escalation during the COVID-19 lockdown, perceived causes or precipitating factors, and coping strategies employed by the participants. Table 5 summarizes the rich thematic content derived from the in-depth interviews, offering a snapshot of the varied experiences, precipitating factors, and coping mechanisms related to intimate partner violence during the COVID-19 lockdown.

Discussion

This study examined the prevalence of IPV among couples during the COVID-19 restrictions and over their lifetime from the perspectives of men. Over the past year, three out of four respondents experienced IPV, while over four out of five reported IPV at some point in their lives. IPV encompassed verbal altercations, physical assault, and sexual coercion or a combination during these periods. The proportions of male- and female-perpetrated violence were similar. Themes identified COVID-19 as a factor that either triggered or intensified existing interpersonal violence due to partners being confined at home and financial stress. Other influences included unresolved disputes, childbirth, disrespect toward the spouse's parents, lack of affection, conflicts about child discipline, and suspected infidelity. Participants suggested improved communication and increased involvement of men in family life as potential solutions. The occurrence of IPV in the past year was predicted by age, religion, marital duration, education, and spousal occupation. Similarly, marital duration, education, and spousal occupation independently predicted lifetime IPV.

The elevated prevalence of IPV reported by the majority of respondents, both over their lifetime (86.4%) and during the COVID-19 restrictions (76.2%), contrasts with pre-pandemic rates documented in the study location (7.4–46.8%) (Amole et al., 2016; Iliyasu et al., 2011, 2013), as well as

Table 2 Pattern of physical assault and sexual coercion during the COVID-19 pandemic and over lifetime, Kano, Nigeria

	Prevalence during one year of COVID-19 restrictions (March 2020-February 2021), n (%)	Happened before, but not during COVID-19 restrictions, n (%)	Prevalence of lifetime ever occurrence, n (%)	McNemar's χ^2 <i>P</i> -value
The pattern of male perpetrated violence				
I insulted or swore or shouted or yelled at my partner	182 (43.3)	77 (18.3)	259 (61.7)	0.28
I pushed, shoved, or slapped my partner	196 (46.7)	91 (21.7)	287 (68.3)	0.001*
I punched or kicked or beat-up my partner	172 (40.9)	66 (15.7)	238 (56.7)	0.63
I destroyed something belonging to my partner or threatened to hit my partner	215 (51.2)	70 (16.7)	285 (67.9)	<0.001*
I used force (like hitting, or holding down, to make my partner have sex	164 (39.0)	81 (19.3)	245 (58.3)	0.59
I insisted on sex when my partner did not want to or insisted on sex without a condom	178 (42.4)	114 (27.1)	292 (69.5)	0.005*
Male-perpetrated intimate partner violence	350 (83.3)	21 (5.0)	371 (88.3)	<0.001*
The pattern of female perpetrated violence				
My spouse...				
... insulted or swore or shouted or yelled at me	182 (43.3)	52 (12.4)	234 (55.7)	0.88
... pushed, shoved, or slapped me	194 (46.2)	72 (17.1)	266 (63.3)	0.04*
... punched or kicked or beat-me up	184 (43.8)	70 (16.7)	254 (60.5)	0.36
... destroyed something belonging to me or threatened to hit me	180 (42.9)	75 (17.9)	255 (60.7)	0.45
... used force (hitting, holding down) to make me have sex with her	183 (43.6)	68 (16.2)	251 (59.8)	0.49
... insisted on sex when I did not want to or insisted on sex without a condom	165 (39.3)	90 (21.4)	255 (60.7)	0.99
Female perpetrated intimate partner violence	342 (81.4)	26 (6.2)	368 (87.6)	<0.001*
The pattern of intimate partner violence among couples (<i>n</i> = 420)				
Couples that had verbal altercation	204 (48.6)	79 (18.8)	283 (67.4)	<0.001*
Couples that experienced physical violence	292 (69.5)	36 (8.6)	328 (78.1)	<0.001*
Couples that reported sexual coercion	241 (57.4)	99 (23.6)	340 (81.0)	<0.001*
Couples that experienced combined verbal and physical violence	178 (42.4)	23 (5.5)	201 (47.9)	0.045*
Couples that experienced combined verbal, physical and sexual violence	167 (39.8)	10 (2.4)	177 (42.1)	<0.001*
Couples that experienced at least one form of intimate partner violence	320 (76.2)	43 (10.2)	363 (86.4)	<0.001*

Table 3 Logistic regression model for predictors of intimate partner violence among couples during the COVID-19 lockdown, Kano, Nigeria ($n = 420$)

Characteristics	N	The proportion of couples that experienced IPV during the COVID-19 restrictions No. (%)	P value	Crude OR (95% CI)	Adjusted OR (95% CI)	P value
Age group, years			0.21			
20–29	79	64 (81.0)		Referent	Referent	
30–39	139	119 (85.6)		1.39 (0.67–2.91)	1.27 (0.53–1.96)	0.46
40–49	117	106 (90.6)		2.26 (1.18–5.22)	2.01 (1.14–4.75)	0.027*
≥ 50	85	76 (89.4)		1.98 (1.18–4.82)	1.57 (1.12–4.67)	0.036*
Ethnicity			0.67			
Hausa	236	206 (87.3)		–	–	
Fulani	96	81 (84.4)		–	–	
Other	88	78 (88.6)		–	–	
Religion			0.037*			
Islam	348	297 (85.3)		Referent	Referent	
Christianity	72	68 (94.4)		2.92 (1.12–8.35)	2.32 (1.13–6.92)	0.029*
Marital duration, years			< 0.001*			
< 5	163	127 (77.9)		Referent	Referent	
5–9	84	77 (91.7)		3.12 (1.32–7.35)	2.69 (1.10–6.59)	0.006*
≥ 10	173	161 (93.1)		3.80 (1.90–7.61)	3.37 (1.64–6.92)	0.017*
Education			0.011*			
Non-Formal	51	44 (86.3)		1.82 (1.13–5.62)	1.58 (1.12–4.76)	0.041*
Primary	182	168 (92.3)		2.13 (1.14–6.23)	2.11 (1.13–5.75)	0.024*
Secondary/ Post-secondary	187	153 (81.8)		Referent	Referent	
Occupation			0.63			
Unemployed	30	24 (80.0)		–	–	
Farmer	51	46 (90.2)		–	–	
Civil servant	134	118 (88.1)		–	–	
Businessman/trading	196	170 (86.7)		–	–	
Others	9	7 (77.8)		–	–	
Monthly income, Naira			0.33			
< 30,000	86	72 (83.7)		–	–	
≥ 30,000	334	293 (87.7)		–	–	
Spousal education			0.66			
Non-Formal	55	47 (85.5)		–	–	
Primary	33	29 (87.9)		–	–	
Secondary	183	163 (89.1)		–	–	
Post-secondary	149	126 (84.6)		–	–	
Spousal occupation			< 0.001*			
Homemaker	116	88 (75.9)		Referent	Referent	
Trader	153	148 (96.7)		9.42 (3.51–25.28)	7.44 (2.73–20.28)	0.018*
Civil servant	34	29 (85.3)		1.85 (1.16–5.22)	2.04 (1.16–6.01)	0.043*
Business	22	21 (95.5)		6.68 (1.18–51.94)	7.07 (1.18–46.17)	0.013*
Other	95	79 (83.2)		1.57 (0.79–3.12)	1.42 (0.69–2.89)	0.76
Cigarette smoking			0.09			
Yes	42	40 (95.2)		3.26 (0.77–13.90)	2.57 (0.37–6.46)	0.33
No	378	325 (86.0)		Referent	Referent	
Alcohol use			0.75			
Yes	27	24 (88.9)		–	–	
No	393	341 (86.8)		–	–	
Drug/substance use			0.73			
Yes	19	17 (89.5)		–	–	
No	401	348 (86.8)		–	–	

*Significant at $p < 0.05$; OR odds ratio, CI confidence interval

Hosmer–Lemeshow chi-square = 14.37, $p = 0.13$

Table 3 (continued)

The logistic model includes the following variables: age group, religion, length of marriage, education, spousal occupation, and cigarette smoking

in other regions of Nigeria (15.2–40.2%) (Okenwa et al., 2009; Oyediran & Feyisetan, 2017), South Africa (20–50%) (Mpondo et al., 2019), and globally (9.2%) (Campbell et al., 2023). This emphasizes not only the pervasive nature of IPV in the studied population but also its worldwide prevalence.

Our figure during the COVID-19 restrictions (76.2%) exceeds those from southern Nigeria (35.9–40.2%) (Adam & Erhus, 2022; Ezenwoko et al., 2020), parts of Africa (Uganda (68%) (Kifle et al., 2024), Ethiopia (22.4%) (Tadesse et al., 2022), Egypt (43.8%) (Moawad et al., 2021)), and Asia (Bangladesh (45.29%) (Rayhan & Akter, 2021)), but was comparable to Kuwait (71%) (Alsaleh, 2022). Furthermore, it surpasses the global (31%), developing (33%), and developed regions' estimates (14%) during the pandemic (Kifle et al., 2024). Studies in Europe reported a 23–32% increase in IPV against women (Arenas-Arroyo et al., 2021), while in the USA a surge of 10–33% was documented (Gosangi et al., 2021; Kifle et al., 2024), underscoring a widespread concern. This necessitates region-specific approaches to understand and address IPV during health crises.

Comparing the types of violence, verbal altercations, physical violence, and sexual coercion exhibited higher lifetime prevalence rates than during the COVID-19 restrictions, indicating a nuanced impact of the pandemic on different forms of IPV. The prevalence of combined verbal and physical violence, as well as combined verbal, physical, and sexual coercion, showed a decrease during the COVID-19 restrictions, albeit remaining substantial. The observed variation in intimate partner violence (IPV) prevalence rates between the lifetime and COVID-19 restriction periods can be attributed to the pandemic's multifaceted impact on couples. The heightened stress and uncertainty during the restrictions may have intensified verbal altercations, physical violence, and sexual coercion over a lifetime, reflecting cumulative stressors. Disruption of routines and increased time together could have influenced the dynamics of IPV. Couples might have developed adaptive mechanisms and sought support services during the pandemic, contributing to a decrease in certain forms of IPV. Public awareness campaigns and education may have further influenced behavioral changes. These speculations highlight the complex interplay of factors, warranting further research for a comprehensive understanding of IPV dynamics during and beyond the pandemic.

Our findings indicate a comparable lifetime prevalence of IPV perpetration among men (88.3%) and women (87.6%), challenging traditional gendered perceptions (Oloniniyi et al., 2023). This aligns with a study in Nigeria (Ezenwoko

et al., 2020), which reported lower proportions during the COVID-19 lockdown (44.8% for men and 37.6% for women) compared to our respective figures of 87.6% and 88.3%. The prevalence of specific forms of violence, including physical assault and sexual coercion, exhibited remarkable similarities between genders, both over a lifetime and during the COVID-19 restrictions, contrasting with reported gender-specific dominance in other studies (Oloniniyi et al., 2023).

Comparisons to global gender-specific estimates highlight higher proportions in our sample, indicating a critical need for targeted interventions. While explanations for these variations are multifaceted, our study underscores the importance of a comprehensive understanding of perpetration dynamics. Studies conducted in the United States (Kifle et al., 2024; Oswald et al., 2023), Europe (Vives-Cases et al., 2021), and national studies (Ezechi et al., 2023; Fawole et al., 2021) contribute diverse perspectives, revealing both commonalities and variations in IPV patterns across different populations. This emphasizes the need for region-specific approaches in understanding and addressing IPV during health crises.

The prevalence rates observed in our study underscore the need for multifaceted interventions that consider the bidirectional nature of IPV. Tailored strategies should address the specific challenges faced by both men and women, fostering a more inclusive approach to IPV prevention and support services. This discussion contributes to the ongoing dialogue on IPV perpetration, enriching the literature with diverse perspectives and guiding future research and interventions in this critical area.

The observed variations in IPV during the COVID-19 restrictions can be attributed to a multitude of factors, reflecting the complex interplay of cultural, socioeconomic, and contextual influences. The heightened stressors, economic uncertainties, and social isolation imposed by the pandemic restrictions likely played a substantial role in the observed increase in IPV. The disruption of routines and the uncertainty about the future may have created a volatile environment conducive to escalating violence within intimate relationships.

The surge in IPV during the pandemic relative to pre-COVID literature could be linked to intensified stress and anxiety resulting from economic uncertainties and social isolation, combined with disrupted routines, forming a potent mix conducive to escalating violence (Bradbury-Jones & Isham, 2020; Usher et al., 2020; Campbell et al., 2023). Additionally, the impact of social stress, when compounded by pre-existing toxic social norms and gender

Table 4 Logistic regression model for predictors of lifetime prevalence of intimate partner violence in urban Kano, Nigeria ($n = 420$)

Characteristics	N	The proportion of couples that ever-experienced IPV No. (%)	P value	Crude OR (95% CI)	Adjusted OR (95% CI)	P value
Age group			0.21			
20–29	79	64 (81.0)		Referent	Referent	
30–39	139	118 (84.9)		1.32 (0.64–2.73)	1.24 (0.34–2.76)	0.35
40–49	117	103 (88.0)		1.72 (0.78–3.81)	1.63 (0.46–2.97)	0.46
≥ 50	85	78 (91.8)		2.61 (1.05–6.79)	2.45 (0.68–5.38)	0.23
Ethnicity			0.79			
Hausa	236	206 (87.3)		–	–	
Fulani	96	81 (84.4)		–	–	
Others	88	76 (86.4)		–	–	
Religion			0.15			
Islam	348	297 (85.3)		Referent	Referent	
Christianity	72	66 (91.7)		1.89 (0.78–4.59)	1.69 (0.68–5.34)	0.81
Marital duration (years)			0.012*			
< 5	163	131 (80.4)		Referent	Referent	
5–9	84	74 (88.1)		1.81 (1.18–3.89)	1.63 (1.17–3.58)	0.037*
≥ 10	173	158 (91.3)		2.57 (1.34–4.96)	2.38 (1.21–4.66)	0.021*
Education			0.002*			
Non-formal	51	44 (86.3)		1.67 (1.12–4.77)	1.64 (1.11–3.88)	0.039*
Primary	182	169 (92.9)		2.07 (1.17–5.49)	2.01 (1.12–4.66)	0.016*
Secondary/post-secondary	187	150 (80.2)		Referent	Referent	
Occupation			0.54			
Unemployed	30	24 (80.0)		–	–	
Farmer	51	47 (92.2)		–	–	
Civil servant	134	115 (85.8)		–	–	
Businessman/trading	196	170 (86.7)		–	–	
Others	9	7 (77.8)		–	–	
Monthly income (Naira)			0.29			
< 30,000	86	71 (82.6)		–	–	
≥ 30,000	334	292 (87.4)		–	–	
Spousal education			0.24			
Non-formal	55	47 (85.5)		Referent	Referent	
Primary	33	31 (93.9)		2.64 (0.53–13.26)	2.57 (0.43–12.77)	0.57
Secondary	183	162 (88.5)		1.31 (0.55–3.16)	1.29 (0.25–3.11)	0.78
Post-secondary	149	123 (82.6)		0.81 (0.34–1.90)	0.91 (0.38–1.64)	0.95
Spousal occupation			0.001*			
Homemakers	116	91 (78.5)		Referent	Referent	
Petty trading	153	144 (94.1)		4.40 (1.96–9.84)	3.90 (1.73–8.82)	0.013*
Civil service	34	30 (88.2)		2.06 (0.66–6.40)	2.29 (1.17–7.20)	0.017*
Business	22	21 (95.5)		5.77 (0.74–45.00)	6.29 (1.18–49.45)	0.001*
Others	95	77 (81.1)		1.18 (0.60–2.31)	1.13 (0.57–2.24)	0.67
Alcohol use			0.85			
Yes	27	23 (85.2)		–	–	
No	393	340 (86.5)		–	–	
Drug/substance use			0.69			
Yes	19	17 (89.5)		–	–	
No	401	346 (86.3)		–	–	

*Significant at $p < 0.05$; OR odds ratio, CI confidence interval

Hosmer–Lemeshow chi-square = 12.67, $p = 0.16$

The logistic model includes the following variables: age group, religion, length of marriage, education, spousal education, and spousal occupation

Table 5 Themes and illustrative quotes from in-depth interviews with married men, Kano, Nigeria

Themes	Illustrative quotes
IPV experiences	<p><i>Pre-existing violence</i> “Even before COVID, there was violence. At times I shouted at her when we had disagreements, and she also retaliated. Sometimes I kept quiet, especially when I sensed it might escalate. Occasionally, it led to physical fights.”—Bricklayer, 47</p> <p><i>Escalation during COVID-19</i> “I experienced violence from my wife even before COVID-19. This worsened during the lockdown. I came home, observed the house untidy, and when I enquired, she yelled at me. I was so angry; I even slapped her. With the prolonged stay-at-home during COVID, and no income, things only got worse.”—Farmer, 30</p> <p><i>Changes in previously peaceful relationships</i> “Before COVID-19 we lived peacefully. But it all changed during the lockdown because I couldn’t bring home the things I used to. She mocked me, and it led to verbal exchanges and occasional brawls.”—Businessman, 32</p>
Perceived causes/ precipitating factors	<p><i>Economic strain and financial conflicts</i> “I don’t know why suddenly my wife became irritable. I blame the disruptive effects of the COVID-19 lockdown and economic hardship.”—Trader, 28</p> <p><i>Childbirth and financial strain</i> “She wanted me to spend lavishly as before despite the economic downturn. We had our first child during the pandemic, and violence escalated.”—Businessman, 27</p> <p><i>Intolerance of mistreatment and abuse towards parents</i> “I asked her to leave because she was disrespectful to my parents. Luckily, we reconciled after COVID.”—Car washer, 30</p> <p><i>Lack of affection and misunderstandings</i> “She prepared breakfast, but I told her I would skip it as usual. She misconstrued it as a lack of love, suspecting I preferred someone else’s cooking.”—Tea seller, 28</p> <p><i>Disagreements over child discipline</i> “She maltreated our children. I advised her, but it led to violence. I left the house to avoid escalation.”—Teacher, 37</p> <p><i>Insecurity and suspicions leading to violence</i> “She slapped me suspecting a romantic chat with a potential second wife. I forgave her.”—Trader, 37</p>
Coping with violence	<p><i>Use of the “silent treatment”</i> “When angry, I kept quiet and left the house to calm down. I returned when she had calmed down too.”—Vegetable seller, 32</p> <p><i>Financial sanctions for control</i> “I stopped attending to her financial needs. When she apologized, we continued as normal. The lifeline of the marriage is with men; patience is crucial.”—Teacher, 37</p>
Marriage type	<p><i>Improved communication and active participation</i> “Peace is enhanced through good communication and supporting one’s spouse. During the lockdown, I did things I didn’t use to do, like helping with domestic work. I revealed my secrets and promised never to cheat.”—Car parts dealer, 39</p>

power dynamics within relationships, may have contributed to the observed rise in interpersonal violence (Evans et al., 2020). Substance use, exacerbated by stress, can further amplify the manifestation of violent behavior.

Qualitative themes revealed a nuanced picture of IPV, emphasizing the chronic nature of violence in some relationships. Pre-existing tensions, characterized by shouting, retaliation, and intermittent physical altercations, were acknowledged by participants. This underscores the importance of understanding IPV as a dynamic phenomenon deeply rooted in relational histories. The findings highlight the exacerbation of violence during the COVID-19 lockdown with prolonged stay-at-home and economic hardships as pivotal contributors to escalating tensions. Economic strain, coupled with the frustration of perceived failure to meet traditional provider roles, manifested in heightened conflicts. The findings align with broader

literature emphasizing the socio-economic determinants of IPV (Dim, 2020; Ince-Yenilmez, 2022).

Surprisingly, participants noted a shift from previously harmonious relationships to heightened conflict during the lockdown leading to verbal exchanges and occasional brawls rooted in economic pressures. This shift challenges traditional notions that peaceful relationships are immune to crisis-induced strain and reinforces the vulnerability of all relationships during times of heightened stress.

Perceived causes or precipitating factors for IPV during the lockdown were multifaceted. Economic strain and financial conflicts were recurrent themes, echoing the broader literature linking financial stress to increased IPV (Schwab-Reese et al., 2016). Additionally, childbirth, financial strain, mistreatment of parents, lack of affection, misunderstandings, disagreements over child discipline, and insecurity were identified as contributors to violent episodes. This diversity underscores the need for tailored

interventions that recognize the varied sources of tension within relationships.

Coping strategies employed by participants underscore the complex negotiation of power dynamics within relationships. The “silent treatment” emerged as a common method for de-escalation, providing partners with space to cool down before engaging in further communication. Financial sanctions for control were also reported, demonstrating the multifaceted nature of power dynamics within these relationships. The findings align with existing literature emphasizing the importance of communication and active participation in domestic responsibilities as strategies to enhance peace within marriages (Breckenridge et al., 2019). Improved communication and mutual support emerged as protective factors against the escalation of violence, suggesting the potential efficacy of positive relationship behaviors in mitigating IPV.

These findings have significant implications for policy and preventive practices. Effective interventions should recognize the nuanced nature of IPV dynamics, considering variations in types of violence and the bidirectional nature of perpetration. Tailored preventive strategies addressing the specific stressors and challenges faced during the COVID-19 restrictions are crucial. Furthermore, initiatives focusing on transforming cultural norms and power structures within relationships may contribute to long-term IPV reduction. The observed patterns during the COVID-19 restrictions necessitate a comprehensive and dynamic approach to IPV prevention and support services, taking into account the multifactorial influences on intimate partner relationships.

Our study is among the first to examine COVID-19-related IPV from the perspective of men in northern Nigeria. Using a mixed methods design, we were able to capture the experiences of men as both perpetrators and victims of IPV during lockdown conditions. However, the study had certain limitations. First, our study only included married men, recounting violence solely from their perspectives, thereby risking social desirability bias. Second, there may be a tendency for men to under-report being victims of IPV due to fear of societal ridicule (Alsaleh, 2022). Third, the study lacks information on participants’ employment status changes during COVID-19 restrictions, and the pregnancy status of participants’ spouses is unknown. Finally, partners were not interviewed concurrently, posing limitations to achieving a balanced dyadic or multilevel analysis for validating self-reported measures of intimate partner violence. It is part of a planned separate study.

Conclusions

The study’s findings underscore the pervasive nature of intimate partner violence (IPV), with a higher prevalence reported during the COVID-19 restrictions compared to pre-pandemic

rates. These figures surpass not only local but also international estimates, emphasizing the global impact of IPV, especially during health crises. Distinct patterns were observed in the types of violence, with verbal altercations, physical violence, and sexual coercion exhibiting higher lifetime prevalence rates compared to the COVID-19 restrictions, highlighting a nuanced impact of the pandemic on various forms of IPV. Notably, the bidirectional nature of IPV perpetration challenges traditional gendered perceptions, with similar prevalence rates observed among men and women both over a lifetime and during the pandemic. The study identifies key predictors of IPV, emphasizing the importance of considering demographic and contextual factors in designing targeted interventions. These findings contribute to a comprehensive understanding of IPV dynamics, crucial for informing effective prevention and support strategies, particularly during health crises. To prevent IPV, it is crucial to implement context-specific strategies involving men as advocates for gender equality, promoting better communication, increasing men’s involvement in family life, and providing support services for victims. These strategies should be integrated into future epidemic preparedness and response plans.

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Data availability Requests for deidentified primary data by persons or agencies outside of our research team will be entertained if made in accordance with Nigeria data privacy rules.

Declarations

Ethics approval The study protocol received approval from the Bayero University Research Ethics Committee.

Informed consent Written or thumb-printed informed consent was obtained from all participants.

Conflict of interest All authors declare no conflicts of interest.

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