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Prevalence and factors influencing intimate partner sexual violence against women aged 15–49 in Kenya: findings from the 2022 Kenya demographic and health survey

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Abstract

Background Sexual violence, a global concern, disproportionately affects women. In Kenya, over 40% of women experience intimate partner violence, reflecting a pressing need for understanding and addressing this issue. Sub-Saharan Africa faces a 18.7% prevalence with deep-rooted determinants like unequal power relations and cultural practices. Consequences from unwanted pregnancy to trauma hinder development goals. This study focuses on sexual violence among Kenyan women aged 15–49, aiming to inform policies and contribute to a safer, more equitable society.

Methods This study analyzed 2022 Kenya Demographic Health Survey data. It used a two-stage cluster sampling method, surveyed 32,156 women aged 15–49, examined determinants of sexual violence, and employed statistical analysis to identify significant predictors.

Results This study revealed several significant factors associated with the risk of sexual violence among women in Kenya. Educational attainment emerged as a key determinant, with women holding primary or secondary education showing higher odds of experiencing sexual violence compared to those with higher education. Desire for children also played a significant role; women whose partners desired more children had higher odds of experiencing sexual violence compared to those with mutual or differing desires for children. Domestic violence exposure was strongly associated with sexual violence, as women who experienced domestic violence had 8.69 times the odds of experiencing sexual violence. Additionally, partner alcohol consumption increased the likelihood of sexual violence, as did cultural attitudes, with women who believed that a wife's refusal of sex justified physical violence facing higher odds of sexual violence.

Conclusions and recommendations This study identifies key factors, including education, domestic violence, alcohol consumption, and cultural attitudes, that increase sexual violence risk. Recommendations include education, addressing domestic violence, promoting healthy relationships, and challenging harmful norms.

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Keywords Sexual violence, Prevalence, Determinants, Women, Kenya

Introduction

Sexual violence is a pervasive and profound public health issue with far-reaching implications for human rights, health, and social well-being [1]. Globally, it stands as one of the most prevalent and distressing forms of violence experienced by women [2]. According to the World Health Organization (WHO), sexual violence encompasses any sexual act, attempt to obtain a sexual act, or any act that leverages coercion to infringe upon a person's sexuality, regardless of the perpetrator's relationship to the victim or the setting in which it occurs [3]. This disconcerting phenomenon includes acts such as rape, defined as the physically forced or coerced penetration of the vulva or anus with a penis, another body part, or an object [4]. Women, in particular, bear a higher risk of falling victim to sexual violence [5].

Kenya, like many nations, grapples with the staggering burden of sexual violence against women [6, 7]. Government statistics from the Kenya Demographic and Health Survey (KDHS) have revealed alarming figures, indicating that over 40% of women have endured physical or sexual intimate partner violence in their lifetime, with the lifetime violence prevalence standing at 20.5% [8]. These statistics underline the pressing need to comprehensively understand the nature and determinants of sexual violence in Kenya, particularly among women aged 15–49 [9].

Sub-Saharan Africa, as a region, also faces a significant challenge in addressing sexual violence, with an overall prevalence of 18.7% against women [10]. The determinants of this scourge are multifaceted and deeply rooted, often entwined with unequal power relations in society, cultural practices and ideologies, the control of women's sexuality, and the objectification of women for pleasure [11]. These determinants shape the complex landscape of sexual violence, giving rise to myriad adverse outcomes, including unwanted pregnancies, psychological distress, increased vulnerability to HIV and sexually transmitted infections, alcoholism, suicidal tendencies, pervasive fear, anxiety, the shroud of secrecy, and long-term trauma [12].

These consequences not only undermine the fundamental human rights and dignity of women but also pose significant challenges to achieving global development goals as envisaged in the Millennium Development Goals and Kenya's national aspirations outlined in Vision 2030 [13]. However, it is essential to note that the full extent of the burden of sexual violence and its determinants remains inadequately understood, often masked by poor documentation and underreporting [14].

The primary objective of this study is to shed light on the prevalence and determinants of sexual violence among women aged 15–49 in Kenya, drawing insights from the 2022 Kenya Demographic and Public Health Surveys. By conducting a comprehensive analysis, this study seeks to contribute valuable knowledge that can inform effective policies and measures to combat the challenge of sexual violence in Kenya and, in doing so, take meaningful strides towards fostering a safer, more equitable society for women.

Methods and tools

Study design and sampling methods

This was a complex cross-sectional survey that undertook a secondary analysis of Gender-based violence data retrieved during the 2022 Kenya Demographic Health Survey (KDHS) [15]. The survey was conducted from February 17 to July 31, 2022. Employing a stratified two-stage cluster sampling approach, 1,692 clusters were selected from the Kenya Household Master Sample Frame (K-HMSF) using equal probability selection (EPSEM). Among the initially chosen 1,692 clusters, which encompassed 42,022 households, one cluster in Mandera County was excluded due to security concerns, resulting in 1,691 clusters. The 2022 Kenya Demographic and Health Survey (2022 KDHS) was implemented by the Kenya National Bureau of Statistics (KNBS) in collaboration with the Ministry of Health (MoH) and other stakeholders. Funding for the survey was provided by the Government of Kenya, the United States Agency for International Development (USAID), the Bill & Melinda Gates Foundation, the World Bank, the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA), Nutrition International, the World Food Programme (WFP), the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women), the World Health Organization (WHO), the Clinton Health Access Initiative, and the Joint United Nations Programme on HIV/AIDS (UNAIDS) [15].

Sample size of the study

A weighted sample of 33,879 women aged 15–49 was recorded in the 2022KDHS dataset. This study included 15,269 women of reproductive age who responded to questions related to sexual violence, encounters with sexual violence from any perpetrator, including current and former spouses or other intimate partners [15].

Variables of the study

Outcome variables

The dependent variable was sexual violence which was defined based on responses to the DHS survey questions. The questions usually enquire if the respondent has ever been subjected to any kind of sexual violence whether rape, forced sexual intercourse or other instances of sexual coercion. The relevant survey question(s) in the DHS dataset related to sexual violence typically include:

1. “Ever been physically forced into unwanted sex by husband/partner(D105H)?”.
2. “Ever been forced into other unwanted sexual acts by husband/partner(D105H)?”.
3. “Ever been physically forced to perform sexual acts respondent didn't want to(D105H)?”

These questions were then coded as binary (Yes=1, No=0) to create the outcome variable for instance, if a respondent responded ‘Yes’ to any of the questions, the outcome variable shall be coded as 1 (Every respondent who has ever experienced sexual violence). If the least number of affirmative answers was received from the respondent who answered the question as “No”, then the outcome variable will be coded as 0 which denotes no experience of sexual violence.

Independent variables

Possible determinants of sexual violence were; Age (grouped into; 15–19, 20–29, 30–39, 40–49), Type of residence (rural or urban), Highest educational level(no education, primary, secondary and higher education), religion(catholic, protestant, African instituted churches, others), Husband/partner's education level(no education, primary, secondary and higher education), Wealth index(poorest, poorer, middle, richer, richest), employment status(employed, unemployed), number of household members(10 and below, 11 and above), sex of household head male, female), partners desire for more children(both want the same number, husband wants more children, husband wants fewer children), respondent currently working(yes or no), a person who usually decides on the respondents healthcare(respondent alone, respondent and husband/partner, husband/partner alone), exposure to media such as TV, radio, newspaper(low, high), alcohol consumption by respondent(no, yes), partner alcohol consumption(no, yes), exposure to domestic violence(no, yes) and Beating is justified if the wife refuses to have sex with the husband(No, yes). Note: Employment status here refers to the broader categorization of the respondent as either employed or unemployed. This variable assesses whether the respondent is engaged in any form of employment at the time of the study, capturing their general employment situation.

In contrast, the variable “respondent currently working” specifically examines whether the respondent is actively working at the time of the survey, focusing on their current involvement in the workforce, regardless of broader employment status.

Data analysis

Data cleaning and analysis were conducted using STATA 17 software. To account for unequal probability sampling across clusters and ensure representativeness, sample weights were applied. Descriptive statistics were used to determine frequencies and percentages, while bivariate analysis with binary logistic regression assessed associations between independent variables and sexual violence. Significant variables identified in the bivariate analysis were further examined in a multivariate logistic regression model. Adjusted Odds Ratios (AOR) and corresponding p-values were reported for the significant predictors of sexual violence. A significance level of $p < 0.05$ and a 95% confidence interval (CI) were applied. The analysis utilized data from the domestic violence module of the Kenya Demographic and Health Survey (KDHS), which provided insights into intimate partner violence. The **SVYset** command in STATA was employed to account for the complex survey design, and sampling weights were applied to adjust for unequal selection probabilities, ensuring that the findings were both representative and statistically valid.

Results

Table 1 below summarizes the socio-demographic characteristics of 15,269 women aged 15–49 from the 2022 Kenya Demographic and Health Survey. The majority (41.9%) were aged 20–29, with 69.6% married. Educational attainment was varied: 37.7% had primary education, and 20.7% had higher education, indicating potential empowerment issues. Most respondents (58%) lived in rural areas, and religious affiliation showed a significant Protestant presence (37.5%). Economic status revealed that 24.9% were in the richest category, while 32.8% were unemployed. Household dynamics reflected traditional structures, with 64.5% male-headed households. Additionally, 40.5% reported exposure to domestic violence, with 13.4% justifying violence if a wife refused sex. High media exposure (77.4%) may have influenced awareness of sexual violence.

Table 2 below shows that 10.4% of women aged 15–49 in Kenya reported experiencing sexual violence, while 89.6% did not.

The bivariate analysis in Table 3 below highlighted several significant factors associated with sexual violence against women in Kenya.

Women aged 40–49 ($COR = 2.03$, $p < 0.000$) and 30–39 ($COR = 1.53$, $p = 0.001$) were particularly vulnerable.

Table 1 Descriptive analysis of socio-demographic characteristics of women

Variables	Frequency (N= 15269)	Percentage (%)
Age in 5-year groups		
15–19	1,039	6.8
20–29	6,400	41.9
30–39	5,017	32.9
40–49	2,814	18.4
Highest educational level		
no education	928	6.1
primary	5,751	37.7
secondary	5,434	35.6
higher	3,156	20.7
Type of place of residence		
urban	6,420	42
rural	8,849	58
Religion		
Catholic	2,857	18.7
Protestant	5,720	37.5
African instituted churches	5,136	33.6
Others	1,557	10.2
Husband/partner's education level		
no education	638	6.1
primary	3,995	38
secondary	3,518	33.5
higher	2,354	22.4
Wealth index		
poorest	2,413	15.8
poorer	2,568	16.8
middle	2,802	18.3
richer	3,689	24.2
richest	3,798	24.9
Employment status		
Unemployed	5,004	32.8
Employed	10,265	67.2
Number of household members		
10 and below	1,751	11.5
11 and above	13,518	88.5
Sex of household head		
male	9,852	64.5
female	5,417	35.5
Partner's desire for children		
both want the same number	2,000	64.2
husband wants more children	835	26.8
husband wants fewer children	282	9
Respondent currently working		
no	6,231	40.8
yes	9,038	59.2
A person who usually decides on the respondent's health care		
Respondent alone	4,306	40.5
Respondent and husband/partner	4,758	44.8
husband/partner alone	1,561	14.7
Exposure to media		
Low	3,370	22.6
High	11,520	77.4

Table 1 (continued)

Variables	Frequency (N = 15269)	Percentage (%)
Alcohol consumption by respondent		
No	4,416	86.9
Yes	663	13.1
Partner alcohol consumption		
no	10,654	69.8
yes	4,615	30.2
Exposure to domestic violence		
No	9,086	59.5
Yes	6,183	40.5
Beating is justified if the wife refuses to have sex with the husband		
no	13,228	86.6
yes	2,041	13.4

Table 2 Prevalence of sexual violence against women aged 15–49 in Kenya

Experienced any sexual violence?	Frequency (%)	Percentage (%)
Yes	1596	10.4
No	13,673	89.6
Total	15,269	100

Educational attainment played a crucial role, with those having primary (COR = 2.48, $p < 0.000$) and secondary education (COR = 1.79, $p < 0.000$) at higher risk, while higher education appeared protective (COR = 0.95, $p = 0.691$). Rural residence (COR = 1.16, $p = 0.011$) and being in the poorer wealth quintile (COR = 1.45, $p < 0.000$) also increased vulnerability. Employment was linked to greater risk (COR = 1.76, $p < 0.000$). Notably, alcohol consumption—both by respondents (COR = 1.91, $p < 0.000$) and partners (COR = 3.20, $p < 0.000$)—was a strong predictor, along with exposure to domestic violence (COR = 14.04, $p < 0.000$). Cultural attitudes justifying violence further exacerbated these risks (COR = 1.63, $p < 0.000$).

The multivariate analysis in Table 4 below showed educational attainment significantly impacted sexual violence risk; women with primary education (AOR: 2.35, 95% CI: 1.22–4.54) and those with secondary education (AOR: 2.13, 95% CI: 1.04–4.36) showed higher odds of 2.35 and 2.13 respectively than women with higher education. The desire for children influenced outcomes, with the partner/husband wanting more children (AOR: 1.75, 95% CI: 1.28–2.38) than both partners wanting the same number of children and the husband wanting fewer children. Notably, exposure to domestic violence presented a striking odd of 8.69 than women who didn't report any form of domestic violence (AOR: 8.69, 95% CI: 5.85–12.91), indicating a strong association with current experiences of sexual violence. Additionally, partner alcohol consumption increased had increased 1.66 odds of experiencing sexual violence than when a partner doesn't

consume alcohol (AOR: 1.66, 95% CI: 1.22–2.25). Cultural attitudes also played a role; the belief that beating is justified if a wife refuses sex resulted in higher odds of predicting sexual violence (AOR: 2.17, 95% CI: 1.54–3.04).

Discussions

The findings of this study provided critical insights into the prevalence and factors influencing sexual violence against women aged 15–49 in Kenya, drawing on data from the 2022 Kenya Demographic and Health Survey. The study found that 10.4% of women aged 15–49 in Kenya reported experiencing sexual violence. This figure demonstrates the persistent and significant nature of sexual violence in Kenya, consistent with findings from previous studies in similar settings. For instance, studies conducted in neighboring countries such as Uganda and Tanzania have reported similar prevalence rates, with estimates ranging between 8% and 15% [16, 17]. The relatively high prevalence rate in Kenya suggests that sexual violence remains a pervasive problem, despite efforts to address gender-based violence (GBV) in the country. While the overall prevalence is an important statistic, it is essential to recognize that underreporting may affect these estimates [28]. Many victims of sexual violence often do not report their experiences due to stigma, fear of retribution, or lack of trust in law enforcement [18]. Therefore, the true prevalence could be higher than what was reported. A related concern is that social desirability bias, where respondents may underreport sensitive experiences, could lead to an underestimation of the magnitude of the problem.

Educational attainment emerged as a significant factor influencing the risk of sexual violence. Women with primary or secondary education were more likely to report experiencing sexual violence. Interestingly, the risk did not significantly increase for women with higher education. This finding is in line with previous studies that have suggested a complex relationship between education

Table 3 Bivariate analysis of factors associated with sexual violence among women in Kenya

Variables	Experienced any sexual violence?		COR	p-value	95% Conf Interval	
	No (N = 13673) n (%)	Yes(N = 1596) n (%)				
Age in 5-year groups						
15–19	965(7.1)	74(4.6)	1			
20–29	5836(42.7)	564(35.3)	1.24	0.101	0.86	1.78
30–39	4458(32.6)	559(35)	1.53	0.001	1.06	2.20
40–49	2415(17.7)	399(25)	2.03	0.000	1.39	2.95
Highest educational level						
No education	859(6.3)	69(4.3)	1			
primary	4968(36.3)	783(49.1)	2.48	0.000	1.85	3.32
secondary	4879(35.7)	555(34.8)	1.79	0.000	1.32	2.43
higher	2967(21.7)	189(11.9)	0.95	0.691	0.67	1.37
Type of place of residence						
Urban	5824(42.6)	596(37.4)	1			
rural	7850(57.4)	999(62.6)	1.16	0.011	0.98	1.36
Religion						
Catholic	2544(18.6)	313(19.6)	1			
Protestant	5163(37.8)	557(34.9)	0.99	0.842	0.79	1.22
African instituted churches	4505(32.9)	631(39.5)	1.09	0.248	0.88	1.36
Others	1461(10.7)	96(6)	0.42	0.000	0.31	0.58
Husband/partner's education level						
No education	581(6.1)	57(5.9)	1			
primary	3515(36.9)	479(49.6)	1.89	0.000	1.36	2.64
secondary	3210(33.7)	308(31.9)	1.39	0.009	0.98	1.97
higher	2232(23.4)	122(12.6)	0.83	0.218	0.55	1.26
Wealth index						
poorest	2142(15.7)	271(17)	1			
poorer	2227(16.3)	341(21.3)	1.45	0.000	1.14	1.84
middle	2476(18.1)	326(20.4)	1.22	0.019	0.96	1.55
richer	3305(24.2)	384(24.1)	1.02	0.792	0.81	1.29
richest	3524(25.8)	274(17.2)	0.76	0.004	0.58	1.00
Employment status						
unemployed	4616(33.8)	388(24.3)	1			
Employed	9057(66.2)	1207(75.7)	1.76	0.000	1.48	2.09
Number of household members						
10 and below	1572(11.5)	179(11.2)	1			
11 and above	12,101(88.5)	1416(88.8)	1.03	0.687	0.82	1.31
Sex of household head						
Male	8907(65.1)	945(59.2)	1			
female	4766(34.9)	651(40.8)	1.30	0.000	1.11	1.52
Partner's desire for children						
both want the same number	1877(66.1)	123(44.4)	1			
husband wants more	709(25)	127(45.5)	1.83	0.000	1.24	2.70
husband wants fewer	254(8.9)	28(10.1)	1.65	0.027	0.87	3.13
Respondent currently working						
No	5697(41.7)	533(33.4)	1			
yes	7976(58.3)	1062(66.6)	1.62	0.000	1.37	1.91
A person who usually decides on the respondent's health care						
Respondent alone	3807(39.5)	500(50.5)	1			
Respondent and husband/partner	4432(46)	326(32.9)	0.57	0.000	0.46	0.71
husband/partner alone	1398(14.5)	164(16.6)	0.85	0.096	0.65	1.12
Exposure to media						
Low	2972(22.3)	398(25.7)	1			

Table 3 (continued)

Variables	Experienced any sexual violence?		COR	p-value	95% Conf Interval	
	No (N= 13673) n (%)	Yes(N= 1596) n (%)				
High	10,368(77.7)	1152(74.3)	0.97	0.601	0.82	1.15
Alcohol consumption by respondent						
No	3970(87.5)	446(82.4)	1			
Yes	568(12.5)	95(17.6)	1.91	0.000	1.33	2.77
Partner alcohol consumption						
No	9864(72.1)	790(49.5)	1			
yes	3809(27.9)	806(50.5)	3.20	0.000	2.73	3.74
Exposure to domestic violence						
No	8882(65)	203(12.8)	1			
Yes	4791(35)	1392(87.2)	14.04	0.000	11.07	17.79
Beating is justified if the wife refuses to have sex with the husband						
No	11,979	1249(78.3)	1			
yes	1,694	347(21.7)	1.63	0.000	1.36	1.96

Table 4 Multivariate analysis of factors associated with sexual violence among women in Kenya

Variables	AOR	p-value	95% Conf Interval	
Highest educational level				
No education	1			
primary	2.35	0.011	1.22	4.54
secondary	2.13	0.039	1.04	4.36
higher	1.74	0.219	0.72	4.21
Religion				
Catholic	1			
Protestant	0.83	0.341	0.57	1.22
African instituted churches	0.77	0.199	0.52	1.15
Others	0.50	0.017	0.28	0.88
Partner's desire for children				
both want the same number	1			
husband wants more	1.75	0.000	1.28	2.38
husband wants fewer	1.03	0.915	0.62	1.70
A person who usually decides on the respondent's health care				
Respondent alone	1			
Respondent and husband/partner	0.57	0.001	0.41	0.79
husband/partner alone	0.90	0.633	0.60	1.37
Partner alcohol consumption				
No	1			
yes	1.66	0.001	1.22	2.25
Exposure to domestic violence				
No	1			
Yes	8.69	0.000	5.85	12.91
Beating is justified if the wife refuses to have sex with the husband				
No	1			
yes	2.17	0.000	1.54	3.04

and vulnerability to sexual violence. While higher education often provides women with greater autonomy and resources, women with less education may be more vulnerable to violence due to factors such as economic dependence, lack of empowerment, and limited access to support networks [19, 20]. The increased risk among women with primary and secondary education may

reflect broader societal inequalities and norms that render women in these groups more vulnerable to violence. Women with higher levels of education might be less exposed to environments where such violence is normalized or may have better access to resources, legal recourse, and support services. However, as the current study did not find a significant relationship for women

with higher education, further exploration is needed to understand this dynamic fully.

The desire for children was another important predictor of sexual violence, with women whose partners wanted more children exhibiting a 1.75 times greater likelihood of experiencing sexual violence. This finding aligns with research by [20] and [21] which suggests that controlling behaviours surrounding reproductive decisions, including coercion and violence, are often linked to a male partner's desire for more children. In many cultures, including Kenya, gender dynamics and expectations around fertility can exacerbate violence against women, particularly when men exert control over women's reproductive rights [22].

Exposure to domestic violence presented a striking association with sexual violence, with women who had experienced domestic violence being nearly nine times more likely to report sexual violence. This result is consistent with extensive literature demonstrating the intersection between domestic violence and sexual violence. Research by [23] highlights that women who experience physical violence are at a significantly higher risk of sexual abuse, with intimate partner violence often serving as a precursor to sexual violence. Domestic violence creates an environment where women's autonomy is restricted, and they may be coerced into sexual acts or subjected to non-consensual sexual violence as part of broader patterns of control and abuse.

Partner alcohol consumption was also found to be a significant risk factor for sexual violence, with women whose partners consumed alcohol having a 1.66 times higher likelihood of experiencing sexual violence. The association between alcohol use and sexual violence has been well-documented globally, with research suggesting that alcohol use can reduce inhibitions, increase aggression, and impair judgment, all of which can escalate the likelihood of sexual violence [24, 25]. In Kenya, alcohol consumption is often linked to community norms around masculinity, where men's alcohol consumption may serve as a proxy for aggressive or dominant behaviour, which can translate into an increased risk of violence against their partners.

Cultural attitudes about gender roles and marital relations also played a crucial role in determining the likelihood of experiencing sexual violence. Specifically, women who believed that beating is justified if a wife refuses to have sex was significant indicating that cultural norms and beliefs that tolerate violence in intimate relationships contribute significantly to sexual violence. These findings corroborate previous studies that emphasize the role of cultural beliefs in perpetuating gender-based violence [26]. In many societies, including Kenya, such attitudes are deeply ingrained and often perpetuate cycles of abuse, making it essential to challenge and change these

harmful beliefs through public education and community-based interventions [27].

The findings of this study have significant implications for both policy and practice. The high prevalence of sexual violence underscores the need for more robust interventions at the community, institutional, and policy levels. The role of education in influencing sexual violence risk highlights the importance of addressing gender inequality and improving educational opportunities for women and girls. Policies aimed at increasing women's educational attainment, especially in rural and marginalized areas, could be a critical step in reducing the risk of sexual violence. The findings on partner dynamics, particularly regarding the desire for children, domestic violence exposure, and alcohol consumption, call for targeted interventions that address male behaviours and attitudes [28]. Programs that work with men to challenge harmful gender norms and promote healthier relationships may reduce the incidence of sexual violence. Additionally, addressing substance abuse through public health campaigns and interventions can be a vital strategy in mitigating the risk factors for sexual violence. Future research should consider longitudinal designs that can better capture the causal pathways linking the identified risk factors with sexual violence. In-depth qualitative studies could also provide further insight into the lived experiences of women who face sexual violence and the contextual factors that contribute to their vulnerability. Further exploration of the role of men in preventing sexual violence and improving gender relations is also warranted. This study makes an important theoretical contribution by linking multiple individual, relational, and societal factors that influence the risk of sexual violence. It also offers practical insights for the design of targeted interventions aimed at addressing the root causes of sexual violence in Kenya. These findings have the potential to inform both policy development and programmatic responses aimed at reducing sexual violence and promoting the rights and well-being of women.

Conclusion

This study contributes to a deeper understanding of the prevalence and risk factors associated with sexual violence against women in Kenya. By identifying significant predictors such as educational attainment, partner dynamics, exposure to domestic violence, and cultural attitudes, the findings offer important directions for future policy and interventions. While there is much to be done to address the high prevalence of sexual violence, these results provide valuable evidence that can inform efforts to reduce gender-based violence and promote gender equality in Kenya and beyond.

Strengths and limitations

A key strength of this study lies in its use of nationally representative data, which provides a comprehensive understanding of sexual violence risk factors across Kenya. The large sample size enhances the generalizability of the findings, making them highly relevant for policymakers and practitioners. However, the cross-sectional design of the study limits the ability to establish causal relationships between the identified risk factors and sexual violence. Additionally, the reliance on self-reported data may have introduced recall bias or social desirability bias, as respondents may underreport sensitive experiences.

Recommendations

Our study on sexual violence in Kenyan women aged 15–49 offers crucial recommendations for addressing this issue. To create a safer, fairer society, we suggest: awareness programs, age-specific interventions, focusing on rural areas, collaborating with religious leaders, economic empowerment, supporting family planning, promoting shared healthcare decisions, continuous data collection, cross-sector collaboration, regular program assessment and legal reforms, accessible shelters for survivors, and further regional research. These steps highlight multisector collaboration and continuous evaluation's importance in effectively combating sexual violence in Kenya.

Abbreviations

WHO	World Health Organization
KDHS	Kenya Demographic and Health Survey
K-HMSF	HMSF-Kenya Household Master Sample Frame
EPSEM	Equal Probability Selection
AOR	Adjusted Odds Ratios
KNBS	Kenya National Bureau of Statistics
MoH	Ministry of Health

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Author contributions

Emmanuel Asher Ikwarra: Conceptualized the study, and led the data analysis, and interpretation, drafted and revised the manuscript ensuring alignment with the study objectives. Atwijiukiire Humphrey: Analysed the data, led data interpretation and contributed to the methodology section. Kasande Meble: Assisted with the literature review, and the introduction section drafting. Isako: Revised the manuscript to align it with the study objectives and the study topic, data analysis and compiling the final revised manuscript. Wamani Gamukama Hannington: Contributed to findings interpretation and manuscript review, ensuring contextual relevance. Emmanuel Chiebuka Jacob: Contributed to data analysis.

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Data availability

The data set used is openly available upon permission from the MEASURE DHS website (URL: <https://www.dhsprogram.com/data/available-datasets.cfm>).

Declarations

Ethics approval and consent to participate

We obtained authorization to utilize the KDHS dataset from the DHS Program website, available at <https://www.dhsprogram.com/data/available-datasets.cfm>. The data provided by the Demographic and Health Survey has been carefully anonymized before their public release. The 2022 Kenyan Demographic Health Survey underwent a comprehensive review by the National Health Research Ethics Committee of Kenya (KHREC), ICF IRB and received approval.

Competing interests

The authors declare no competing interests.

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