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Suicide Ideation Among Intimate Partner Violence Victims in Colombia: A Cross-Sectional Survey Using a Nationally Representative Sample

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ABSTRACT

Introduction and Aims: Intimate Partner Violence is a significant public health problem that contributes to negative health consequences. This study aimed to identify the association of suicide ideation and intimate partner violence (IPV) among men and women in Colombia.

Methods: We used secondary data from the 2015 Colombia Demographic Health Survey (DHS). Logistic regression was used to examine the association between suicide ideation and explanatory variables, stratified by sex. The outcome was suicide ideation, while the independent variables were IPV type (psychological, physical, and sexual violence), age, place of residence, education level, marital status, employment status, wealth index, ownership of assets, parental violence, spousal controlling behavior, physically hurt a partner and number of sex partners.

Results: Approximately 12.1% of females and 3.4% of males reported suicide ideation due to IPV. By type of IPV, the prevalence of suicide ideation for psychological, physical and sexual IPV was 21.7%, 21.2%, and 35.4% among females and 7.3%, 6.6%, and 14.9% among males respectively. Among females, the odds of suicide ideation by IPV type were: OR 6.06, (95% CI 5.06, 7.25) for physical IPV, OR 5.32 (95% CI 4.03, 7.24) for psychological IPV, and OR 4.16 (95% CI 3.47, 4.99) for sexual IPV. The odds of suicide ideation among males were OR 2.67 (95% CI 2.00, 3.56) for physical IPV, OR 4.17 (95% CI, 3.00, 5.78) for psychological IPV and OR 3.11 (95% CI 1.80, 5.39) for sexual IPV. Separated/widowed individuals, rural residents, and perpetrating physical violence had higher odds of suicide ideation across both genders.

Conclusions: Suicidal ideation was associated with psychological, physical, and sexual IPV across both genders. This highlights the importance of screening for mental health distress and suicide risk among victims of IPV regardless of gender.

1 | Introduction

Intimate partner violence (IPV) is a human rights violation and a significant public health problem. IPV includes physical, emotional or sexual violence by current or former partners, and is associated with a myriad of social, economic and health consequences [1]. Although IPV affects both sexes, women experience a markedly

higher burden of its consequences, including physical injuries, heightened fear, and posttraumatic stress [2, 3]. As per the World Health Organization estimates, globally, nearly one-third of the women aged 15 years and older have experienced some form of violence by an intimate partner in their lifetime, with higher proportions reported in Africa and South East Asia [4].

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Considerable variation exists in the prevalence of IPV against women, with reported estimates of 21%–38% in Latin America and the Caribbean, 27%–44% in Sub Saharan Africa and 16%–23% in Europe for physical and/or sexual violence [5]. Similarly, a study among 46 low- and middle-income countries (LMICs) conducted from 2010 to 2017 revealed the prevalence of IPV to vary between 5% and 40% [3]. Given its high prevalence, IPV particularly against women has been the focus of substantial research globally, and men are often overlooked by scholars and policy makers. It is therefore not surprising that global estimates of IPV against men remain elusive. However, nationally representative data from some LMICs reveal that prevalence can range anywhere between 23% and 43% depending on whether it is lifetime or within a 12 months recall period [6, 7].

Considering the consequences of IPV, survivors may suffer from negative health consequences and face challenges in their ability to participate fully in society. Both men and women encounter poor mental health outcomes as a result of IPV [8, 9], which range from depression, psychological distress, post-traumatic stress disorder, self-harm or suicidal behavior, substance abuse, and anxiety among others [9–11]. An increased risk of suicidal attempts has been reported in people who have been exposed to some form of IPV during their lifetime [12]. Although prior suicide attempt is the strongest predictor for suicide, evidence shows an association between exposure to IPV and suicide [13–15]. Young adults particularly, females tend to reattempt suicide and/or use a more violent method to harm themselves in future attempts [13]. Suicidal behavior among those who experience persistent abuse may occur as an extreme outcome related to perceived lack of options to address the situation or safe ways of exiting an abusive relationship [16].

National prevalence estimates of lifetime and past 12 months of physical and or sexual IPV against women in Colombia stand at 30% and 12% respectively [4]. Multiple risk factors contribute to IPV, with 86% of reported cases in 2018 in the south American country being against women [17]. Like in many other LMICs, IPV in Colombia is influenced by factors such as, societal acceptance and justification of such behavior, rigid traditional gender norms, limited socio-emotional skills, entrenched cultural beliefs, jealousy, alcohol abuse, and a personal history of violence [17, 18]. On the other hand, Colombia's mortality rate due to suicide is relatively high with a 4-year average of 5.7 per 100,000 inhabitants between 2017 and 2020 [19]. However, the rate of suicide attempts in the country is much higher with some regions recording estimates exceeding 100 cases per 100,000 [20].

Research on suicide ideation among IPV victims in Colombia is limited and often focuses mainly on youth [15]. Exploring gender-specific links to suicidality is essential for a comprehensive understanding of suicide risk factors in order to implement appropriate prevention strategies that may differ between genders [21]. This study aimed to identify the gender disaggregated association of suicide ideation among victims of IPV in Colombia using the 2015 Demographic Health Survey (DHS) data.

2 | Methods

2.1 | Study Population and Data

The data for the research study was obtained from the 2015 Colombia Demographic Health Survey. Demographic health surveys provide evidence-based health information in LMICs. The survey was cross-sectional and nationally representative. A two-stage stratified cluster sampling design was used to select participants for the survey. Colombia has been part of the DHS program since 1986 when the first survey was conducted. The 2015 DHS data that was used in this study is from the seventh DHS cycle. The data used in this study is publicly available from the DHS official website [22]. Additional details about the survey, and the methodology used and the ethical approval are available elsewhere [22].

2.2 | Study Participants

A total of 44,733 eligible females aged 13 to 49 years were identified from the households surveyed and 38,718 participated in the survey yielding a response rate of 86.6%. Additionally, a total 47,889 eligible males aged 13 to 59 years were identified; 35,783 participated, yielding with a response rate of 74.7%. This research study was only limited to the participants who were currently married or in a union or divorced or separated, and responded to both the domestic violence and suicide ideation questions. Thus, respondents who responded to the IPV questions but not the suicide ideation question were excluded from our study. The selection on marital status was because the questions on domestic violence were only limited to participants who were currently or previously married/cohabiting, but not those who had never been in a union. A total of 25,446 females were currently or previously in a union. A total of 16,667 females responded to the question on suicide ideation, out of which 5 declined to give a response. Thus, 16,662 females were included in this study. Furthermore, a total of 20,927 males were currently or previously in a union and 14,698 responded to the suicide ideation question, however four declined to respond. Hence, a total of 14,694 males were included in this study.

2.3 | Variables of Interest

The outcome of interest was suicide ideation. First, the study participants were asked whether they had experienced any form of IPV: that is, psychological, physical and sexual violence by a current or previous partner. This question was used to identify victims of IPV for this study. The psychological IPV questions inquired whether they had ever been humiliated, threatened, ignored or belittled. The physical IPV questions inquired whether they had ever been hit, kicked, slapped, punched, threatened, attacked or burnt. The sexual IPV question inquired whether they had ever been forced to have intercourse when they did not want. If a respondent affirmed to experiencing IPV, this was then followed up with various questions, out of which one of them was used to derive the outcome of interest in this study. Participants were asked, "Please tell me if the following things happened to you as a result of what your (last) partner did to you: (in reference to experiencing IPV) Did you wish to commit suicide?"; with a response option of "no" or "yes." The main exposure variables in this study were IPV types in the

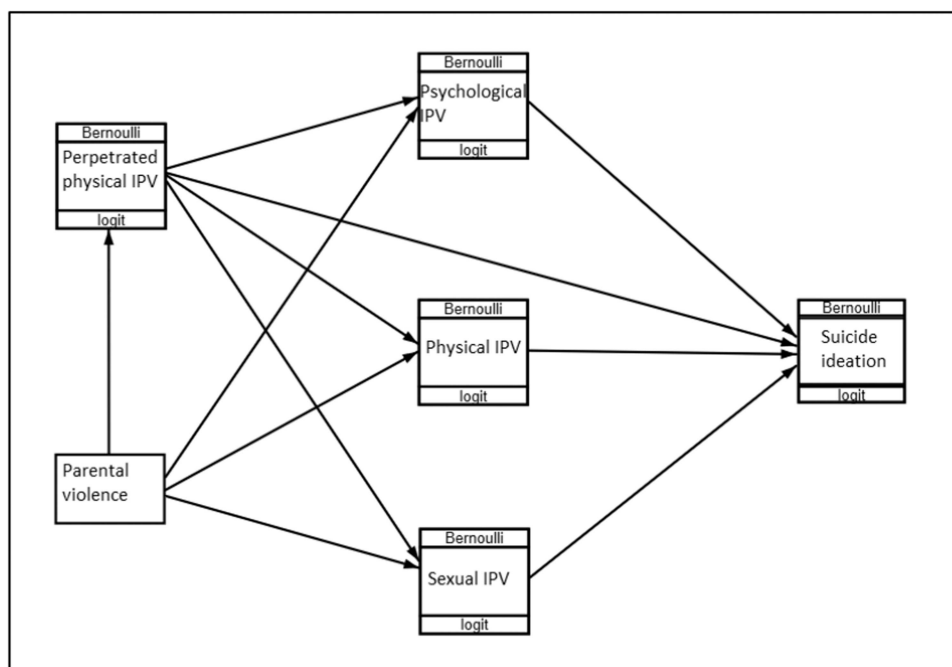


FIGURE 1 | Analytical framework for direct and indirect effects.

form of psychological, physical and sexual IPV. It was possible to identify suicide ideation among victims of IPV by category because respondents reported different types of IPV. Respondents who did not report experiencing IPV were not included in the analytic sample. Details of the questionnaire are available on the DHS website [22]. Covariates used in the study included age categorized as 13–24, 25–34, 35–44, 45–49 females or (45–59 males); the place of residence categorized as rural vs urban; the level of education categorized as no education, primary, secondary and tertiary education; and the marital status categorized as currently in a union or separated/divorced/widowed. The economic variables included employment status, the wealth index and ownership of assets such as land or a house. Additional variables related to violence included witnessing parental violence by the respondents' father beating their mother, spousal controlling behavior, and physically hurting their partner when the partner was not hurting them and the number of sex partners, excluding the husband/wife.

2.4 | Statistical Analysis

The two-stage sample design of the survey was taken into consideration during the analyzes, including the clustering, stratification and domestic violence weights. Cross tabulations were done for categorical variables based on the Pearson Chi Square tests. Analyzes were stratified by sex due to different domestic violence weights. Logistic regression analysis was used to determine the association between suicide ideation and IPV, as well as other explanatory variables. Univariate logistic regression was done and used as the basis for the multivariable models. The basis for inclusion and retention of variables in the multivariable models was based on a p -value of 0.1 [23]. Each type of violence had separate multivariable models; and the final models were found to have a good fit [24]. Generalized structural equation modeling (GSEM) was used to estimate

pathways linking childhood exposure to violence with suicide ideation using logistic and Bernoulli distributions. Perpetration of physical IPV was specified as an intermediate variable, while psychological, physical, and sexual IPV were modeled as mediators. The analytic framework is shown in Figure 1. Direct and indirect effects were estimated within the same framework. Indirect effects were calculated using post-estimation nonlinear combinations of coefficients, representing the product of coefficients along each hypothesized pathway. The results were presented in Odds Ratios, with 95% confidence interval, and a two-sided p -value of < 0.05 was considered statistically significant. The data analyzes were conducted using Stata 18 (StataCorp. TX, USA).

3 | Results

3.1 | Prevalence of Suicide Ideation and Intimate Partner Violence

Among the females, 12.1% ($n = 2080$) expressed suicide ideation overall. Additionally, 21.7% ($n = 1714$) of psychological IPV victims, 21.2% ($n = 1773$) of physical IPV victims and 35.4% ($n = 703$) of sexual IPV victims reported suicide ideation (Table 1). Suicide ideation and all three forms of IPV combined were reported by 3.5% ($n = 629$) of females (Figure 2). By age group, the highest prevalence of suicide ideation was reported among the older groups; the 45–49-year-olds at 13.7% ($n = 368$) and 35–44-year-olds at 13.7% ($n = 734$). Respondents residing in rural areas also reported higher suicide ideation at 13.6% ($n = 564$), as well as the separated, divorced or widowed females at 19.0% ($n = 889$). Higher suicide ideation was reported among females who owned a house jointly with their spouses 15.8% ($n = 159$). Nearly a quarter (23.4%; $n = 273$) of females who had perpetrated physical violence against their spouse reported suicide ideation. Moreover, 12.5% of females who had a controlling partner reported suicide ideation.

TABLE 1 | Suicide ideation and characteristics among colombian participants by sex, DHS 2015.

Variables	Females (N = 16662)					Males (N = 14694)				
	Had suicide ideation			No suicide ideation		Had suicide ideation			No suicide ideation	
	N	%		N	%	N	%		N	%
Suicide Ideation	2080	12.13		14,582	87.87	513	3.42		14,181	96.58
Psychological IPV										
No	319	4.01		8203	95.99	122	1.41		9405	98.59
Yes	1761	21.46		6379	78.54	391	7.30		4776	92.70
Physical IPV										
No	307	3.58		7969	96.42	200	2.08		10,068	97.92
Yes	1773	21.22		6613	78.78	313	6.61		4113	93.39
Sexual IPV										
No	1377	9.14		13,301	90.86	477	3.24		13,973	96.76
Yes	703	35.35		1281	64.65	36	14.92		208	85.08
Age										
13–24	295	9.52		2853	90.48	54	3.74		1352	96.26
25–34	683	11.33		5071	88.67	145	3.69		4038	96.31
35–44	734	13.69		4509	86.31	139	2.87		3790	97.13
45–49 (45–59 males)	368	13.73		2149	86.27	175	3.53		5001	96.47
Place of residence										
Urban	1516	11.75		10,981	88.25	347	3.12		10,064	96.88
Rural	564	13.55		3601	86.45	166	4.46		4117	95.54
Level of education										
No education	66	16.12		285	83.88	25	4.93		527	95.07
Primary	656	16.08		3275	83.92	176	4.29		4234	95.71
Secondary	938	12.43		6926	87.57	210	3.23		6228	96.77
Tertiary	420	8.76		4096	91.24	102	2.77		3192	97.23
Marital status										
Currently married/in a union	1191	9.40		10,873	90.60	303	2.20		11,502	97.80
Separated/divorced/widowed	889	19.00		3709	81.00	210	8.27		2679	91.73
House ownership										
Does not own	1368	12.42		9480	87.58	297	3.61		8162	96.39
Alone only	220	11.85		1473	88.15	52	3.26		1338	96.74

(Continues)

TABLE 1 | (Continued)

Variables	Females (N = 16662)					Males (N = 14694)				
	Had suicide ideation		No suicide ideation		Chi p-value	Had suicide ideation		No suicide ideation		Chi p-value
	N	%	N	%		N	%	N	%	
Jointly with partner only	333	10.09	2792	89.91		109	2.13	3794	97.87	
Both alone and jointly with partner	159	15.84	837	84.16		55	6.96	887	93.04	
Number of sex partners, excluding husband/wife (past 12 months)					< 0.001					< 0.001
None	1373	10.04	11,748	89.96		271	2.56	9653	97.44	
One or more	693	19.91	2750	80.09		239	5.49	4395	94.51	
Witnessed parental violence [†]					< 0.001					0.01
No	970	9.39	8600	90.61		264	2.92	9134	97.08	
Yes	994	15.73	5453	84.27		224	4.31	4366	95.69	
Don't know	116	17.09	529	82.91		25	4.13	681	95.87	
Bidirectional violence*					< 0.001					> 0.001
No	1807	11.22	13,647	88.78		451	3.25	13,563	96.75	
Yes	273	23.43	935	76.57		62	7.59	618	92.41	
Controlling behavior					< 0.001					0.73
No	92	6.77	1095	93.23		15	3.83	254	96.17	
Yes	1988	12.49	13,487	87.51		498	3.41	13,927	96.59	

*Physically hurt partner when they were not hurting them.
†Father beat mother.

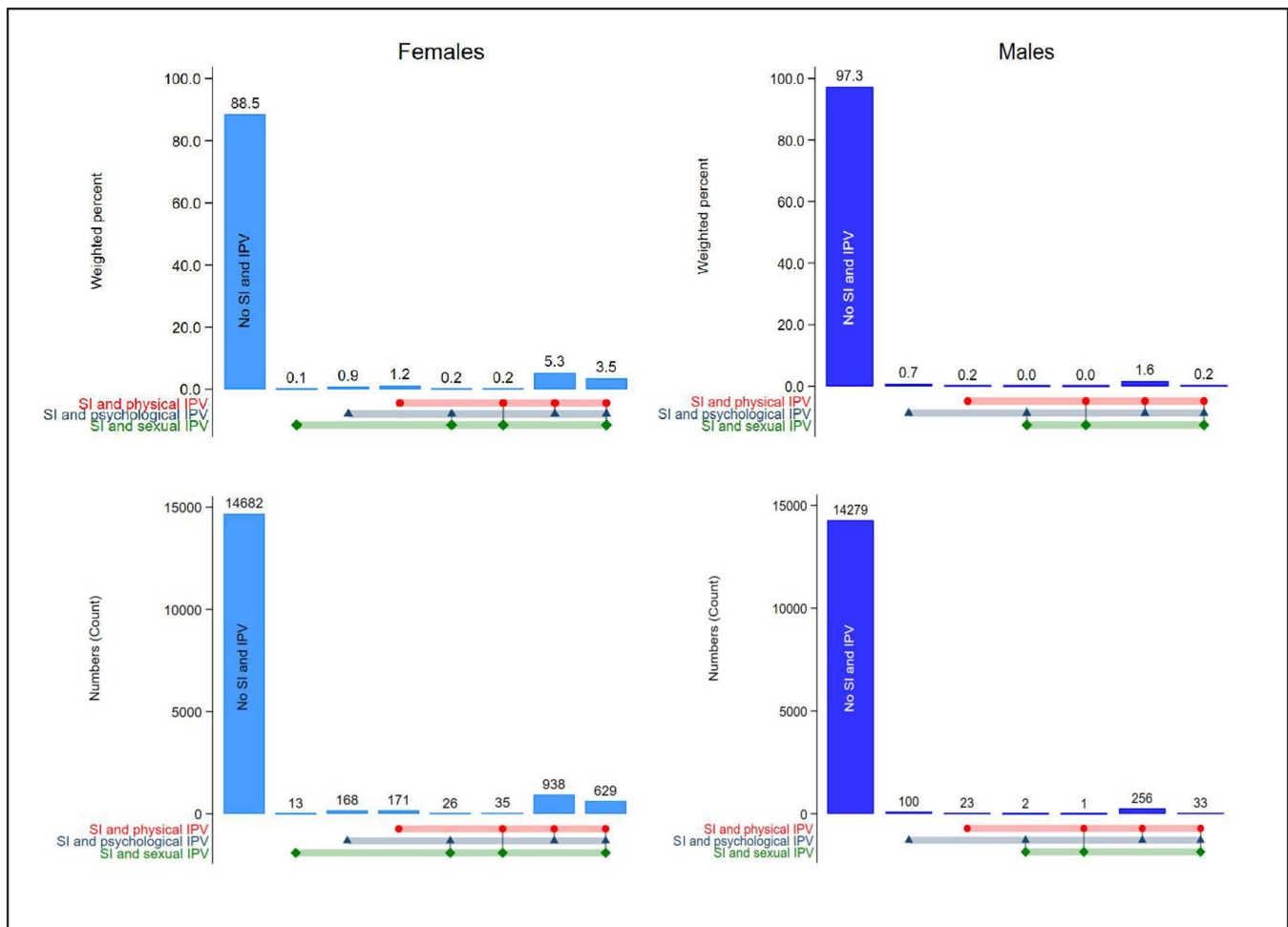


FIGURE 2 | Profiles of suicide ideation and intimate partner violence types by sex. *SI* represents suicide ideation.

Among the male respondents, 3.4% ($n = 513$) reported suicide ideation. By type of IPV, 7.3% ($n = 391$) of psychological, 6.6% ($n = 313$) of physical and 14.9% ($n = 36$) of sexual violence victims considered suicide. All three forms of IPV and suicide ideation were reported by 0.2% ($n = 33$) of male victims. Males from rural areas reported a higher prevalence of suicide ideation at 4.5% ($n = 166$), and 8.3% of respondents who were separated, divorced or widowed reported suicide ideation. A higher prevalence of suicide ideation was reported among males who had perpetrated physical violence against their partner at 7.6% ($n = 62$) and reported parental violence at 4.3% ($n = 224$). Approximately 5.5% ($n = 239$) of males with one or more sexual partners, excluding their partner reported suicide ideation.

3.2 | Risk Factors by Gender

3.2.1 | Unadjusted Odds

The highest odds of suicide ideation were among females who had experienced physical violence (OR 7.26, 95% CI 6.11, 8.62), psychological violence (OR 6.55, 95% CI 5.00, 8.58), and sexual violence (OR 5.44, 95% CI 4.59, 6.44) as shown in Table S1. Females who perpetrated physical violence against their partners, were separated/divorced or widowed, had controlling partners or had additional sex partners besides their spouses were two times more likely to report suicide ideation.

Furthermore, females who resided in rural areas or witnessed parental violence had higher odds of suicide ideation. On the other hand, females with tertiary education were less likely to report suicide ideation.

Among males, the highest odds were reported for psychological IPV (OR 5.51, 95% CI 4.06, 7.47), sexual IPV (OR 5.24, 95% CI 3.24, 8.47) and physical IPV (OR 3.33, 95% CI 2.55, 4.35). Divorced/separated/widowed males were four times more likely to report suicide ideation (OR 4.01, 95% CI 3.05, 5.26). Other factors associated with suicide ideation included residing in rural areas, perpetrating physical violence against their spouses, having additional sex partners and reporting parental violence. On the other hand, males with tertiary education were less likely to report suicide ideation (OR 0.55, 95% CI 0.30, 0.99).

3.2.2 | Adjusted Odds

Among females, each type of IPV was associated with higher odds of suicide ideation, with the highest odds being physical IPV (OR 6.06, 95% CI 5.06, 7.25), psychological IPV (OR 5.32, 95% CI 4.03, 7.24) and sexual IPV (OR 4.16, 95% CI 3.47, 4.99) as shown in Table 2. Females who had more than one sex partner in addition to their spouses, reported parental violence, perpetrated physical violence against their spouses, and had controlling spouses had higher odds of suicide ideation in each of

TABLE 2 | Adjusted odds of suicide ideation and explanatory factors among females, Colombia DHS 2015.

Variable	Psychological IPV ^a			Physical IPV ^b			Sexual IPV ^c		
	AORs	95% CI	p-value	AORs	95% CI	p-value	AORs	95% CI	p-value
Type of IPV									
No	1			1			1		
Yes	5.32	4.03, 7.24	< 0.001	6.06	5.06, 7.25	< 0.001	4.16	3.47, 4.99	< 0.001
Age									
13–24	1			1					
25–34	1.20	0.95, 1.50	0.12	1.27	1.01, 1.61	0.05	1.22	0.97, 1.55	0.09
35–44	1.35	1.06, 1.73	0.02	1.45	1.17, 1.83	0.001	1.30	1.02, 1.66	0.04
45–49	1.28	0.99, 1.65	0.06	1.51	1.17, 1.95	0.002	1.21	0.92, 1.58	0.17
Place of residence									
Urban	1			1			1		
Rural	1.20	1.02, 1.40	0.03	1.45	1.25, 1.73	< 0.001	1.24	1.04, 1.47	0.02
Level of education									
No education	1				NA		1		
Primary	1.10	0.73, 1.66	0.65				1.08	0.72, 1.60	0.72
Secondary	0.90	0.59, 1.36	0.61				0.83	0.55, 1.24	0.36
Higher	0.70	0.46, 1.08	0.11				0.62	0.41, 0.94	0.02
Marital status									
Currently married/union	1			1					
Separated/divorced/widowed	1.37	1.10, 1.71	0.01	1.47	1.18, 1.83	0.001	1.62	1.30, 2.03	< 0.001
House ownership									
Does not own		NA			NA		1		
Alone only							0.75	0.56, 0.99	0.04
Jointly with partner only							1.01	0.75, 1.34	0.97
Both alone and jointly with partner							1.09	0.84, 1.42	0.50
Number of sex partners excluding husband/wife (past year)									
None	1			1			1		
One or more	1.44	1.13, 1.83	0.003	1.32	1.04, 1.67	0.02	1.31	1.03, 1.65	0.03
Witnessed parental violence [†]									
No	1			1			1		
Yes	1.58	1.35, 1.86	< 0.001	1.49	1.27, 1.74	< 0.001	1.6	1.36, 1.88	< 0.001
Don't know	1.65	1.19, 2.28	0.003	1.77	1.30, 2.40	0.001	1.67	1.21, 2.30	0.002

(Continues)

TABLE 2 | (Continued)

Variable	Psychological IPV ^a			Physical IPV ^b			Sexual IPV ^c		
	AORs	95% CI	p-value	AORs	95% CI	p-value	AORs	95% CI	p-value
Bidirectional violence [*]									
No	1			1			1		
Yes	1.81	1.44, 2.26	< 0.001	1.62	1.29, 2.04	< 0.001	2.07	1.63, 2.63	< 0.001
Controlling behavior									
No	1			1			1		
Yes	1.98	1.40, 2.80	< 0.001	2.28	1.64, 3.17	< 0.001	1.92	1.38, 2.68	< 0.001

Abbreviation: AOR, adjusted odds ratio.

^{*}Physically hurt partner when they were not hurting them.

^aAdjusted for age, residence, marital status, sex partners, parental violence, bidirectional violence and controlling behavior.

^bAdjusted for age, residence, education, marital status, sex partners, parental violence, bidirectional violence and controlling behavior.

^cAdjusted for age, residence, education, marital status, house ownership, sex partners, parental violence, bidirectional violence and controlling behavior.

[†]Father beat mother.

the three models. Divorced, or separated or widowed females as well as those residing in rural areas were more likely to think about suicide in each of the three models. Females with tertiary education and those who did not own property (house) had lower odds of sexual violence.

Among males, the highest odds of suicide ideation were reported for psychological IPV (OR 4.17, 95% CI, 3.00, 5.78), sexual IPV (OR 3.11, 95% CI 1.80, 5.39) and physical IPV (OR 2.67, 95% CI 2.00, 3.56) as shown in Table 3. The divorced, separated/widowed males, as well as those who perpetrated physical violence against their partners were more likely to report suicide ideation in each of the three models. Males who reported parental violence were more likely to report suicide ideation in the physical and sexual IPV models. Males residing in rural areas had higher odds of suicide ideation in the three IPV models.

3.2.3 | GSEM Adjusted Odds

Among females, direct paths showed that psychological IPV (OR 3.22, 95% CI 2.36, 4.39), physical IPV (OR 3.56, 95% CI 2.83, 4.48), and sexual IPV (OR 2.53, 95% CI 2.12, 3.03) were significantly associated with higher odds of suicide ideation (Table 4). Perpetration of physical IPV against a partner was also associated with suicide ideation (OR 1.52, 95% CI 1.23, 1.90). Parental violence was associated with higher odds of psychological IPV (OR 1.59, 95% CI 1.44, 1.75), physical IPV (OR 1.88, 95% CI 1.68, 2.09), and sexual IPV (OR 1.82, 95% CI 1.54, 2.15). Indirect effects showed that parental violence indirectly influenced suicide ideation via psychological IPV (OR 1.72, 95% CI 1.44, 2.06) and physical IPV (OR 2.23, 95% CI 1.78, 2.78), and sexual IPV (OR 1.75, 95% CI 1.44, 2.13) as shown in Table 5. The multi-mediator path through perpetrated physical IPV and psychological IPV had an OR of 3.04 (95% CI 1.90, 4.86), and via physical IPV (OR 4.91 95% CI 2.95, 8.17) and via sexual IPV (OR 1.82, 95% CI: 1.41, 2.34).

For males, psychological IPV (OR 1.43, 95% CI 1.12, 1.75), physical IPV (OR 1.52, 95% CI 1.24, 1.81), and sexual IPV (OR 1.99, 95% CI: 1.47, 2.69) were significantly associated with suicide ideation. Perpetration of physical IPV against a partner was not significantly associated with suicide ideation (OR 1.18, 95% CI 0.83, 1.65). Parental violence was associated with higher odds of psychological IPV (OR 1.88, 95% CI 1.65, 2.13), physical IPV (OR 1.68, 95% CI 1.49, 1.88), and sexual IPV (OR 1.91, 95% CI 1.27, 2.89). Indirect effects showed that parental violence indirectly influenced suicide ideation via psychological IPV (OR 2.46, 95% CI 1.89, 3.20) and physical IPV (OR 1.31, 95% CI 1.15, 1.53) and sexual IPV (OR 1.90, 95% CI 1.16, 3.12). The multi-mediator path through perpetrated physical IPV and psychological IPV was significant at (OR 11.73, 95% CI 4.61, 29.86), and via physical IPV at (OR 2.86 95% CI 1.53, 5.36) and via sexual IPV (OR 7.59, 95% CI: 2.24, 25.74).

4 | Discussion

IPV was associated with suicide ideation among both females and males, with higher odds among females. At least 1 in 5 female victims of psychological and physical IPV each, and 1 in 3 of sexual

TABLE 3 | Adjusted odds of suicide ideation and explanatory factors among males, Colombia DHS 2015.

Variable	Psychological IPV ^a			Physical IPV ^b			Sexual IPV ^c		
	AORs	95% CI	p-value	AORs	95% CI	p-value	AORs	95% CI	p-value
Type of IPV									
No	1			1			1		
Yes	4.17	3.00, 5.78	< 0.001	2.67	2.00, 3.56	< 0.001	3.11	1.80, 5.39	< 0.001
Place of residence									
Urban	1			1			1		
Rural	1.61	1.18, 2.19	0.003	1.59	1.14, 2.21	0.01	1.57	1.18, 2.10	0.002
Level of education									
No education		NA		1				NA	
Primary				0.83	0.49, 1.38	0.46			
Secondary				0.64	0.37, 1.00	0.11			
Higher				0.65	0.35, 1.22	0.18			
Marital status									
Currently married/in a union	1			1			1		
Separated/divorced	2.74	2.02, 3.72	< 0.001	3.28	2.41, 4.45	< 0.001	3.86	2.91, 5.12	< 0.001
House ownership									
Does not own	1			1				NA	
Alone only	0.71	0.39, 1.28	0.25	0.67	0.38, 1.19	0.18			
Jointly with partner only	0.94	0.65, 1.34	0.72	0.93	0.65, 1.34	0.71			
Both alone and jointly with partner	1.55	0.93, 2.59	0.10	1.53	0.92, 2.53	0.10			
Witnessed parental violence [†]									
No	1			1			1		
Yes	1.25	0.93, 1.66	0.14	1.34	1.01, 1.78	0.04	1.45	1.09, 1.92	0.01
Don't know	1.09	0.62, 1.93	0.76	1.17	0.66, 2.07	0.59	1.33	0.77, 2.31	0.39
Bidirectional violence*									
No	1			1			1		
Yes	1.57	1.00, 2.48	0.05	1.57	1.01, 2.43	0.05	1.90	1.20, 3.01	0.01

Abbreviation: AOR, adjusted odds ratio.

*Physically hurt partner when they were not hurting them.

^aAdjusted for residence, marital status, house ownership, parental violence and bidirectional violence.^bAdjusted for residence, education, marital status, house ownership, parental violence and bidirectional violence.^cAdjusted for residence, marital status, parental violence and bidirectional violence.[†]Father beat mother.

violence reported suicide ideation, versus 1 in 15 male victims for psychological and physical IPV, and 1 in 7 for sexual violence. This revealed that regardless of gender, sexual IPV victims had a higher prevalence of suicide ideation. This may be due to the stigma surrounding sexual violence, which can lead to shame, fear, disbelief, and social withdrawal-factors that contribute to feelings of hopelessness and suicidal thoughts [25]. In general, females were overrepresented in the prevalence of IPV but also in suicide ideation, consistent with previous studies [3, 26, 27]. In contrast, higher suicide ideation was found among males in a Chinese study [28], however this difference could be due to cultural differences between both population settings. Previous research has also shown that psychological, physical, and sexual forms of IPV significantly contribute to poor mental health outcomes, including suicidality [8, 9, 12].

After controlling for other covariates, the odds of suicide ideation ranged from 4 to 6 times among women exposed to IPV, with the highest odds reported for physical IPV. This estimate is

similar to that from an Italian study in which women who experienced any form of IPV were six times more likely to face psychological distress [29]. The adjusted odds were nearly 3 to 4 times among males exposed to IPV, with higher odds for psychological IPV in this study. Males tend to experience psychological violence through verbal abuse from partners while females experience physical aggression from partners [3, 7, 30]. Both females and males residing in rural areas were more likely to experience suicidal thoughts. This could be linked to feelings of hopelessness or entrapment depending on available opportunities for professional support services, safety and independence [3, 9]. Economic instability and limited resources have also been recognized as factors that increase the risk of suicidal behavior and contribute to the continuation of domestic violence [26]. Additionally, limited resources may increase risk, especially for rural women, whose economic dependence on male partners can elevate both IPV exposure and suicidal ideation [31, 32]. This underscores the need for routine IPV screening and mental health services in rural settings.

TABLE 4 | Direct pathways from IPV types and perpetration of physical IPV by sex.

Variable pathways	Females			Males		
	AORs	95% CI	p-value	AORs	95% CI	p-value
Outcome: Suicide ideation						
Psychological IPV	3.22	2.36, 4.39	< 0.001	1.43	1.12, 1.75	< 0.001
Physical IPV	3.56	2.83, 4.48	< 0.001	1.52	1.24, 1.81	< 0.001
Sexual IPV	2.53	2.12, 3.03	< 0.001	1.99	1.47, 2.69	< 0.001
Perpetrated physical IPV against partner	1.52	1.23, 1.90	< 0.001	1.18	0.83, 1.65	0.24
Outcome: Psychological IPV						
Perpetrated physical IPV against partner	4.60	3.82, 5.53	< 0.001	4.75	3.67, 6.15	< 0.001
Parental violence						
Yes	1.59	1.44, 1.75	< 0.001	1.88	1.65, 2.13	< 0.001
Don't know	1.65	1.35, 2.03	< 0.001	1.80	1.45, 2.26	< 0.001
Outcome: Physical IPV						
Perpetrated physical IPV against partner	7.46	6.00, 9.30	< 0.001	6.30	4.85, 8.25	< 0.001
Parental violence						
Yes	1.88	1.68, 2.09	< 0.001	1.68	1.49, 1.88	< 0.001
Don't know	1.57	1.28, 1.92	< 0.001	1.49	1.19, 1.90	0.001
Outcome: Sexual IPV						
Perpetrated physical IPV against partner	2.80	2.18, 3.60	< 0.001	6.42	3.67, 11.13	< 0.001
Parental violence						
Yes	1.82	1.54, 2.15	< 0.001	1.91	1.27, 2.89	0.002
Don't know	1.97	1.49, 2.59	< 0.001	1.25	0.62, 2.51	0.54
Outcome: Perpetrated physical IPV against partner						
Parental violence						
Yes	1.86	1.56, 2.22	< 0.001	3.00	2.34, 3.88	< 0.001
Don't know	1.09	0.70, 1.70	0.69	2.27	1.22, 4.22	0.01

Abbreviation: AOR, adjusted odds ratio.

Partner controlling behavior was linked to increased suicidal ideation among females but not males. By restricting personal freedom, such behavior, especially when combined with IPV, may lead to depression and feelings of inadequacy [33]. Controlling behavior is associated with IPV both among females and males but also with mental health problems, substance abuse and low self-esteem which could affect well-being [7, 9, 30]. Separated, divorced, or widowed respondents across both sexes were more likely to report suicide ideation across all models. It is probable that IPV contributed to the separation or divorce and that their current marital status attracts discrimination by society; however, these could not be verified in the survey. The widowed category was also lumped together with the divorced and separated, and may have had a different outcome if considered differently. Even after leaving an abusive partner, psychological trauma, including post-traumatic stress disorder, can persist and impact individuals' well-being [9]. Following separation after IPV, some individuals may struggle to afford quality housing, childcare, and maintain employment, affecting income and job prospects. These interconnected challenges can undermine psychosocial well-being and weaken social support, both critical to mental health [9, 30, 31].

Bidirectional violence in the form of perpetrating physical violence against their partner in the absence of provocation and

IPV victimization was associated with suicide ideation among both sexes. However, the fact that our GSEM estimates established a significant association between perpetration of physical IPV against a partner and suicide ideation among females and not males, could imply that female-perpetrated violence could be a retaliatory measure when the male partner is not violent. Nonetheless, while extant literature reveals that some women may use violence defensively, the survey did not assess this component [34]. Approximately 49%–71% of IPV victims admitted to perpetrating violence in previous studies [7, 35, 36]. In this survey, 23.4% and 7.6% of female and male respondents respectively, who engaged in bidirectional violence reported suicide ideation. The distress may stem from IPV victimization, however, guilt from perpetration could also play a role [37]. Parental violence raised the risk of suicide ideation for females but only for physical and sexual IPV among males. Such exposure harms children's well-being and increases the likelihood of experiencing or perpetrating IPV in adulthood [37].

4.1 | Strengths and Limitations of This Study

Strengths: The study provides estimates of suicide ideation prevalence among victims of psychological, physical and sexual IPV. Generally, there is limited information on suicidality due

TABLE 5 | Indirect pathways from parental IPV to suicide ideation by sex.

Variable pathways	Females			Males		
	Indirect AORs	95% CI	p-value	Indirect AORs	95% CI	p-value
Single mediator paths						
Via psychological IPV						
Parental violence						
Yes	1.72	1.44, 2.06	< 0.001	2.46	1.89, 3.20	< 0.001
Don't know	1.80	1.36, 2.40	< 0.001	2.34	1.61, 3.40	< 0.001
Via physical IPV						
Parental violence						
Yes	2.23	1.78, 2.78	< 0.001	1.31	1.15, 1.53	0.001
Don't know	1.78	1.34, 2.36	< 0.001	1.23	1.04, 1.46	0.02
Via sexual IPV						
Parental violence						
Yes	1.75	1.44, 2.13	< 0.001	1.90	1.16, 3.12	0.01
Don't know	1.88	1.41, 2.51	< 0.001	1.24	0.62, 2.51	0.54
Multi-mediator paths						
Via perpetrated physical IPV and psychological IPV						
Parental violence						
Yes	3.04	1.90, 4.86	< 0.001	11.73	4.61, 29.86	< 0.001
Don't know	1.17	0.53, 2.58	0.69	6.19	1.34, 28.58	0.02
Via perpetrated physical IPV and physical IPV						
Parental violence						
Yes	4.91	2.95, 8.17	< 0.001	2.86	1.53, 5.36	0.001
Don't know	1.26	0.41, 3.90	0.69	2.18	1.06, 4.46	0.03
Via perpetrated physical IPV and sexual IPV						
Parental violence						
Yes	1.82	1.41, 2.34	< 0.001	7.59	2.24, 25.74	0.001
Don't know	1.09	0.71, 1.67	0.69	4.48	1.09, 18.44	0.04

Abbreviation: AOR, adjusted odds ratio.

to stigma surrounding mental health. The survey was also conducted using a nationally representative sample; thus, the findings are generalizable to the entire country. While the study offers valuable insight into the relationship between IPV and suicidal ideation, several limitations must be acknowledged. Limitations: The cross-sectional design limits the ability to establish causal relationships, making it challenging to determine the directionality of the associations observed. Additionally, the use of self-reported data introduces the potential for response bias, particularly underreporting by male participants due to stigma or social desirability. The categorization of separated, divorced, and widowed individuals into a single group may also obscure important differences between these subgroups, potentially masking variations in their experiences and risk levels. Furthermore, the absence of contextual information, such as the duration and severity of abuse, access to mental health services, and the presence or absence of social support networks limits the depth of interpretation. While we recognize that IPV types often co-occur, the potential overlap between IPV types was not addressed in this study, but rather physical, emotional, and sexual IPV were modeled separately to isolate the distinct impacts of each form on suicide ideation. Despite these limitations, the findings underscore the critical need for mental health screening among IPV victims.

5 | Conclusion

A higher prevalence of suicide ideation and IPV victimization was recorded among females. Victims of sexual violence reported a higher prevalence of suicide ideation across both sexes. Higher odds were observed for physical IPV among females and psychological IPV among males. This reinforces the importance of mental health support in situations involving intimate partner violence or violence in general.

Author Contributions

Conceptualization: A.A. Data analyses: A.A. Writing – first draft: A.A., S.S. Reviewing and editing the draft: A.A., S.S., M.M.N., M.M., J.M.W. All authors have read and approved the final version of the article. Anne Abio had full access to all of the data in this study and takes complete responsibility for the integrity of the data and the accuracy of the data analysis. Anne Abio affirms that this article is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned have been explained.

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The authors have nothing to report.

Ethics Statement

Informed consent was obtained from study participants. The questionnaire and methodology for the survey was reviewed and approved

by the Survey Technical Committee of Colombia and the ICF Institutional Review Board (IRB). Secondary data with de-identified was used in this study thus, no additional approval was required for this work.

Conflicts of Interest

All authors have no conflict of interest to declare.

Data Availability Statement

Publicly available datasets were analyzed in this study. These data can be found here: <https://dhsprogram.com/>.

The data that support the findings of this study are available in The DHS program at <https://dhsprogram.com/data/available-datasets.cfm>. These data were derived from the following resources available in the public domain:

Colombia 2015 DHS, <https://dhsprogram.com/methodology/survey/survey-display-476.cfm>.

References

1. F. F. Fikree, J. A. Razzak, and J. Durocher, "Attitudes of Pakistani Men to Domestic Violence: A Study From Karachi, Pakistan," *Journal of Men's Health and Gender: The Official Journal of the International Society for Men's Health and Gender* 2, no. 1 (2005): 49–58, <https://doi.org/10.1016/j.jmhg.2005.01.004>.
2. J. E. Caldwell, S. C. Swan, and V. D. Woodbrown, "Gender Differences in Intimate Partner Violence Outcomes," *Psychology Violence* 2, no. 1 (2012): 42–57, <https://doi.org/10.1037/a0026296>.
3. C. V. N. Coll, F. Ewerling, C. García-Moreno, F. Hellwig, and A. J. D. Barros, "Intimate Partner Violence in 46 Low-Income and Middle-Income Countries: An Appraisal of the Most Vulnerable Groups of Women Using National Health Surveys," *BMJ Global Health* 5, no. 1 (2020): e002208, <https://doi.org/10.1136/bmjgh-2019-002208>.
4. World Health Organization, *Violence Against Women Prevalence Estimates 2018: Global, Regional and National Prevalence Estimates for Intimate Partner Violence Against Women and Global and Regional Prevalence Estimates for Non-Partner Sexual Violence Against Women* (World Health Organization, 2021). 1st ed.
5. L. Sardinha, M. Maheu-Giroux, H. Stöckl, S. R. Meyer, and C. García-Moreno, "Global, Regional, and National Prevalence Estimates of Physical or Sexual, or Both, Intimate Partner Violence Against Women in 2018," *Lancet* 399, no. 10327 (2022): 803–813, [https://doi.org/10.1016/S0140-6736\(21\)02664-7](https://doi.org/10.1016/S0140-6736(21)02664-7).
6. K. Oyediran, C. M. Spencer, and S. M. Stith, "Men as Victims of Intimate Partner Violence in Cameroon and Sierra Leone," *Journal of Interpersonal Violence* 38, no. 5–6 (2023): 5211–5235, <https://doi.org/10.1177/08862605221120883>.
7. J. Waila, H. Lule, M. Lowery Wilson, T. Bärnighausen, and A. Abio, "Ugandan Men Exposed to Intimate Partner Violence: A Cross-Sectional Survey of Nationally Representative Data," *Journal of Prevention* 43, no. 4 (2022): 567–588, <https://doi.org/10.1007/s10935-022-00683-2>.
8. R. J. Reid, A. E. Bonomi, F. P. Rivara, et al., "Intimate Partner Violence Among Men," *American Journal of Preventive Medicine* 34, no. 6 (2008): 478–485, <https://doi.org/10.1016/j.amepre.2008.01.029>.
9. N. Moulding, S. Franzway, S. Wendt, C. Zufferey, and D. Chung, "Rethinking Women's Mental Health After Intimate Partner Violence," *Violence Women* 27, no. 8 (2021): 1064–1090, <https://doi.org/10.1177/1077801220921937>.
10. M. B. MacIsaac, L. C. Bugeja, and G. A. Jelinek, "The Association Between Exposure to Interpersonal Violence and Suicide Among Women: A Systematic Review," *Australian and New Zealand Journal of Public Health* 41, no. 1 (2017): 61–69, <https://doi.org/10.1111/1753-6405.12594>.

11. L. Brådvik, "Suicide Risk and Mental Disorders," *International Journal of Environmental Research and Public Health* 15, no. 9 (2018): 2028, <https://doi.org/10.3390/ijerph15092028>.
12. J. Jokinen, K. Forslund, E. Ahnemark, J. P. Gustavsson, P. Nordström, and M. Åsberg, "Karolinska Interpersonal Violence Scale Predicts Suicide in Suicide Attempters," *Journal of Clinical Psychiatry* 71, no. 08 (2010): 1025–1032, <https://doi.org/10.4088/JCP.09m05944blu>.
13. A. Haglund, Å. U. Lindh, H. Lysell, et al., "Interpersonal Violence and the Prediction of Short-Term Risk of Repeat Suicide Attempt," *Scientific Reports* 6, no. 1 (2016): 36892, <https://doi.org/10.1038/srep36892>.
14. M. B. MacIsaac, L. Bugeja, T. Weiland, J. Dwyer, K. Selvakumar, and G. A. Jelinek, "Prevalence and Characteristics of Interpersonal Violence in People Dying From Suicide in Victoria, Australia," *Asia-Pacific Journal of Public Health* 30, no. 1 (2018): 36–44, <https://doi.org/10.1177/1010539517743615>.
15. C. A. Moe, A. Villaveces, F. P. Rivara, and A. Rowhani-Rahbar, "Self-Harming Behavior in Relation to Exposure to Inter-Personal Violence Among Youth and Young Adults in Colombia," *International Journal of Injury Control and Safety Promotion* 29, no. 1 (2022): 76–85, <https://doi.org/10.1080/17457300.2021.2001830>.
16. D. Kazan, A. L. Caele, and P. J. Batterham, "The Impact of Intimate Partner Relationships on Suicidal Thoughts and Behaviours: A Systematic Review," *Journal of Affective Disorders* 190 (2016): 585–598, <https://doi.org/10.1016/j.jad.2015.11.003>.
17. A. M. Garzón Segura and R. J. Carcedo González, "Effectiveness of a Prevention Program for Gender-Based Intimate Partner Violence at a Colombian Primary School," *Frontiers in Psychology* 10 (2020): 3012, <https://doi.org/10.3389/fpsyg.2019.03012>.
18. S. E. Lennon, A. M. R. Aramburo, E. M. M. Garzón, et al., "A Qualitative Study on Factors Associated With Intimate Partner Violence in Colombia," *Ciênc Saúde Coletiva* 26, no. 9 (2021): 4205–4216, <https://doi.org/10.1590/1413-81232021269.21092020>.
19. J. R. Zuluaga Peña, J. P. Zuluaga Peña, Á. P. Vega Landaeta, et al., "Temporal Changes in Suicide Mortality Rates Before and During the COVID-19 Pandemic in Colombia. A Joint Point Regression Model," *Revista Colombiana de Psiquiatría* 54 (2025): 89–97, <https://doi.org/10.1016/j.rcp.2023.09.001>.
20. M. J. Cañon-Ayala, Y. E. Perdomo-Jurado, and A. G. Caro-Delgado, "Spatiotemporal Analysis of Suicide Attempts in Colombia From 2018 to 2020," *Cadernos de Saúde Pública* 40, no. 8 (2024): e00119323, <https://doi.org/10.1590/0102-311xen119323>.
21. A. Miranda-Mendizabal, P. Castellví, O. Parés-Badell, et al., "Gender Differences in Suicidal Behavior in Adolescents and Young Adults: Systematic Review and Meta-Analysis of Longitudinal Studies," *International Journal of Public Health* 64, no. 2 (2019): 265–283, <https://doi.org/10.1007/s00038-018-1196-1>.
22. The Demographic and Health Survey Program. The DHS Program, 2023, <https://dhsprogram.com/>.
23. P. Ranganathan, C. S. Pramesh, and R. Aggarwal, "Common Pitfalls in Statistical Analysis: Logistic Regression," *Perspectives in Clinical Research* 8, no. 3 (2017): 148–151, https://doi.org/10.4103/picr.PICR_87_17.
24. K. J. Archer and S. Lemeshow, "Goodness-of-Fit Test for a Logistic Regression Model Fitted Using Survey Sample Data," *The Stata Journal: Promoting Communications on Statistics and Stata* 6, no. 1 (2006): 97–105, <https://doi.org/10.1177/1536867X0600600106>.
25. E. J. Mellen, D. Y. Kim, E. R. Edenbaum, and J. Cellini, "The Psychosocial Consequences of Sexual Violence Stigma: A Scoping Review," *Trauma, Violence and Abuse* 26, no. 3 (2024): 15248380241279860, <https://doi.org/10.1177/15248380241279860>.
26. S. McManus, S. Walby, E. C. Barbosa, et al., "Intimate Partner Violence, Suicidality, and Self-Harm: A Probability Sample Survey of the General Population in England," *Lancet Psychiatry* 9, no. 7 (2022): 574–583, [https://doi.org/10.1016/S2215-0366\(22\)00151-1](https://doi.org/10.1016/S2215-0366(22)00151-1).
27. T. Tinsae, B. F. Alemayehu, and W. G. Alemu, "Suicide Among Reproductive-Age Women in Northwest Ethiopia: A Community-Based Cross-Sectional Study," *Depression and Anxiety* 2024 (2024): 1–10, <https://doi.org/10.1155/2024/1735716>.
28. L. Lu, L. Ye, T. Zhang, et al., "Gender Differences in Intimate Partner Violence Victimization and Its Relationships With Anxiety, Depression Symptoms and Suicide Behaviours in China," *International Journal of Public Health* 70 (2025): 1607953, <https://doi.org/10.3389/ijph.2025.1607953>.
29. P. Romito, J. Molzan Turan, and M. De Marchi, "The Impact of Current and Past Interpersonal Violence on Women's Mental Health," *Social Science and Medicine* 60, no. 8 (2005): 1717–1727, <https://doi.org/10.1016/j.socscimed.2004.08.026>.
30. J. M. Waila, D. O. Mitiro, M. Lowery Wilson, O. Horstick, and C. W. Musyimi, "There is no Peace", "We are Just Persevering": Triggers, Manifestations, and Consequences of Intimate Partner Violence Against Men in Kenya," *Journal of Interpersonal Violence* 40, no. 21–22 (2024): 08862605241299451, <https://doi.org/10.1177/08862605241299451>.
31. D. M. Capaldi, N. B. Knoble, J. W. Shortt, and H. K. Kim, "A Systematic Review of Risk Factors for Intimate Partner Violence," *Partner Abuse* 3, no. 2 (2012): 231–280, <https://doi.org/10.1891/1946-6560.3.2.231>.
32. A. Mojahed, N. Alaidarous, H. Shabta, J. Hegewald, and S. Garthus-Niegel, "Intimate Partner Violence Against Women in the Arab Countries: A Systematic Review of Risk Factors," *Trauma, violence and Abuse* 23, no. 2 (2022): 390–407, <https://doi.org/10.1177/1524838020953099>.
33. M. E. Dichter, K. A. Thomas, P. Crits-Christoph, S. N. Ogden, and K. V. Rhodes, "Coercive Control in Intimate Partner Violence: Relationship With Women's Experience of Violence, Use of Violence, and Danger," *Psychology of Women* 8, no. 5 (2018): 596–604, <https://doi.org/10.1037/vio0000158>.
34. S. C. Swan, L. J. Gambone, J. E. Caldwell, T. P. Sullivan, and D. L. Snow, "A Review of Research on Women's Use of Violence With Male Intimate Partners," *Violence and Victims* 23, no. 3 (2008): 301–314, <https://doi.org/10.1891/0886-6708.23.3.301>.
35. D. Powney and N. Graham-Kevan, "Male Victims of Intimate Partner Violence: A Challenge to the Gendered Paradigm." in *The Palgrave Handbook of Male Psychology and Mental Health*, eds. J. A. Barry, R. Kinglerlee, M. Seager, and L. Sullivan (Springer International Publishing, 2019), 123–143, https://doi.org/10.1007/978-3-030-04384-1_7.
36. B. L. Russell, ed., *Perceptions of Female Offenders: How Stereotypes and Social Norms Affect Criminal Justice Responses* (Springer New York, 2013), <https://doi.org/10.1007/978-1-4614-5871-5>.
37. J. M. Kafka, E. Moracco, C. Taheri, et al., "Intimate Partner Violence Victimization and Perpetration as Precursors to Suicide," *SSM - Population Health* 18 (2022): 101079, <https://doi.org/10.1016/j.ssmph.2022.101079>.

Supporting Information

Additional supporting information can be found online in the Supporting Information section.

Supporting File 1: hsr272763-sup-0001-supmat.docx.