

Intimate partner violence and declining quality of life in older women over a decade

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Abstract

Purpose:

To analyze the longitudinal association between experiencing and perpetrating intimate partner violence (IPV) and changes in quality of life (QoL) among older women and men.

Methods:

Data were drawn from the EpiFloripa Aging Cohort Study, conducted in Florianópolis, Brazil, over a 10-year period (2013/2014, 2017/2019, and 2023/2024). IPV was assessed using the Conflict Tactics Scale (CTS-1), and QoL using the CASP-19. Generalized Estimating Equation (GEE) models examined adjusted associations, including sex interaction terms and sensitivity analyses.

Results:

A total of 651, 739, and 404 older adults participated in waves 2, 3, and 5, respectively. IPV victimization and perpetration were highly prevalent in both sexes (~ 50%) but declined over time (~ 18–22% in wave 5). Lower QoL was consistently associated with functional limitations, cognitive impairment, depressive symptoms, and never consuming alcohol ($p < 0.05$). Perpetrated IPV was associated with lower QoL among women ($\beta = -2.12$; $p = 0.001$), whereas no significant association was found among men ($\beta = 0.22$; $p = 0.729$). The interaction between sex and perpetration was significant ($p = 0.007$). Sensitivity analyses confirmed a 2.07-point reduction in CASP-19 scores among exposed women ($p = 0.001$).

Conclusions:

The findings demonstrate gender differences in the longitudinal association between IPV and QoL, with reduced QoL observed only among female perpetrators. Gender-sensitive interventions addressing relational dynamics and structural inequalities in later life are needed.

Introduction

Intimate partner violence (IPV) is a major public health concern and is defined as any behavior within an intimate relationship that results in physical, psychological, or sexual harm. Although both women and men may experience IPV, women are disproportionately affected by its health and social consequences (Krug et al., 2002).

Globally, approximately one in three women experience IPV during their lifetime, making it one of the most prevalent forms of violence against women (Kifle et al., 2024). In Brazil, national surveys have reported substantial levels of IPV, while population-based studies among older adults have shown

similarly high prevalence of both victimization and perpetration, with psychological violence representing the most common form (Signorelli et al., 2023; Warmling et al., 2021). Although physical and sexual violence have declined in many settings, psychological IPV remains highly prevalent, reinforcing the need to achieve Sustainable Development Goal 5.2, which aims to eliminate violence against women (Raj, 2023).

Previous studies have identified socioeconomic disadvantage, childhood exposure to violence, limited social support, alcohol use, mental health problems, and functional limitations as important correlates of IPV across the life course (Gunarathne et al., 2023; Miskurka et al., 2016). IPV has consistently been associated with depression, anxiety, post-traumatic stress disorder, physical injuries, and poorer health outcomes (Gunarathne et al., 2023). Longitudinal evidence further suggests that exposure to IPV has lasting adverse effects on physical and mental health (Loxton et al., 2017).

Quality of life (QoL) is an important outcome for evaluating healthy ageing because it captures older adults' perceptions of autonomy, control, self-realization, and well-being. Previous studies conducted in Norway, China, and Finland have consistently reported lower QoL among women exposed to IPV (Alsaker et al., 2018; Bedford et al., 2020; Hisasue et al., 2020). However, evidence regarding sex differences in the relationship between IPV and QoL among older adults remains scarce, particularly from longitudinal population-based studies.

Using data from the second wave of the EpiFloripa Aging Cohort Study, our previous cross-sectional analysis showed that women who experienced or perpetrated IPV had significantly lower QoL, whereas no significant associations were observed among men (Warmling et al., 2021). Whether these gender differences persist over time, however, remains unknown.

To address this gap, the present study examined the longitudinal association between both IPV victimization and perpetration and changes in QoL among older women and men participating in the EpiFloripa Aging Cohort Study over a 10-year follow-up period.

Methods

Study Design, Sample and Data Collection

This study is a longitudinal, population-based household cohort with a representative sample of older adults living in the city of Florianópolis. It used data from the 10-year follow-up of the *Health Conditions of Older Adults in Florianópolis – EpiFloripa Aging Cohort Study*. Details on the study design, methodological procedures, and sampling are available in previous publications (Confortin et al., 2022; Schneider et al., 2017).

Eligibility criteria at baseline included men and women aged 60 years or older, residing in the urban area of Florianópolis. Individuals who were institutionalized, hospitalized, or incarcerated were excluded (Schneider et al., 2017).

Data collection was carried out by trained interviewers through in-person, home-based interviews using a structured digital questionnaire administered on laptops. To ensure data quality, a consistency analysis and quality-control procedure were implemented, including telephone re-interviews using a shortened version of the questionnaire with a random 10% subsample of participants.

At baseline (2009–2010), 1,702 older adults from the city's urban area were interviewed. Follow-ups were conducted in 2013–2014 (n = 1,197), 2017–2019 (n = 1,335), and 2023–2024 (n = 695). For the specific analysis in this study, which examined the association between IPV and quality of life (QoL), waves 2, 3, and 5 were included, as they contained the measurement instruments for both exposure and outcome variables. Inclusion criteria comprised self-responded interviews (without a proxy respondent) and having an intimate partner within the past 12 months. Repeated measures from the three waves were used in the analysis.

Outcome Variable

The outcome variable was quality of life (QoL), measured using the CASP-19 scale, an instrument validated for use in Portuguese and specifically designed for older adults. The scale comprises four domains distributed across 19 items: Control (4 items), Autonomy (5 items), Self-realization (5 items), and Pleasure (5 items). The four domains are not hierarchically ordered. Each item offers four response options on a Likert-type scale, with scores ranging from “often” (3 points), “sometimes” (2 points), “rarely” (1 point), to “never” (0 points). Items 1, 2, 4, 6, 8, and 9 are reverse scored. The total CASP-19 score ranges from 0, indicating complete absence of QoL, to 57, representing maximum life satisfaction (Hyde et al., 2003).

Exposure Variables

Intimate partner violence (IPV) was assessed using the Conflict Tactics Scale – Form R (CTS-1), which was translated and adapted for the Brazilian context (Hasselmann & Reichenheim, 2003). This instrument measures violence within intimate relationships and includes six items on psychological violence, such as insults and threats (e.g., insulting, sulking, leaving the room, irritating the partner, threatening, or destroying objects), and nine items on physical violence, encompassing acts of explicit force (e.g., throwing objects, pushing, slapping, kicking, beating, strangling, or threatening with weapons).

Each item was evaluated dichotomously (yes or no), allowing identification of the directionality of violence: whether the respondent committed the act against the partner (perpetrated violence) or was the victim of the act (suffered violence). The presence of IPV was considered when the participant reported at least one positive response on the scale within the past 12 months.

Adjustment Variables

The minimum adjustment model was defined based on the construction of a Directed Acyclic Graph (DAG) to represent the theoretical model and clarify the role of covariates in the longitudinal association between suffered IPV, perpetrated IPV, and QoL (Figures 1 and 2). This approach was used to minimize covariate selection bias, in line with the literature (Hernán & Robins, 2010).

The DAG was constructed using Dagitty software (version 3.1; Nijmegen, GE, Netherlands) (Textor et al., 2016). For each exposure, a minimum sufficient adjustment model for confounding factors was identified using the backdoor criterion, as follows: 1) For suffered IPV, the adjustment set included sex, age, income, education, social support, alcohol consumption, activities of daily living (ADL), cognitive impairment, and depressive symptoms. 2) For perpetrated IPV, the adjustment set included sex, age, income, education, alcohol consumption, and depressive symptoms.

The covariates used were: sex (male/female), age group (60–69, 70–79, ≥80 years), education (≤4, 5–11, ≥12 years of schooling), per capita family income in minimum wages (≤1, 1.1–5, >5), social support (low or good), alcohol consumption (never, moderate, high), cognitive impairment (no or probable), depressive symptoms (no or suspected depression), and dependence in activities of daily living (ADL) categorized as absent, mild, or moderate/severe. Cognitive impairment was assessed using the Mini-Mental State Examination (MMSE) (Folstein et al., 1975); depressive symptoms were measured by the Geriatric Depression Scale (GDS-15) (Paradela et al., 2005); and ADL dependence was evaluated using the BOMFAQ/OARS Activities of Daily Living Scale (Rosa et al., 2003).

Statistical Analysis

Absolute and relative frequencies (N, %) were used to provide descriptive analyses of the sample characteristics in each study wave. To describe the level of QoL, given the quantitative nature of the variable, measures of central tendency (mean) and dispersion (standard deviation) were employed, according to the characteristics of the sample in each wave, stratified by sex (male and female). Mean comparisons were performed using Student's *t*-test for cognitive impairment, depressive symptoms, and suffered and perpetrated IPV, and ANOVA for age, education, income, and activities of daily living (ADL).

To analyze the association between changes in IPV exposure and QoL levels, multiple linear regression was used, presenting the results as beta coefficients (β) and their corresponding 95% confidence intervals (95% CI) for each exposure (suffered and perpetrated IPV). Repeated measures were modeled using the Generalized Estimating Equations (GEE) method, considering the three study waves for all variables, with a Gaussian distribution and identity link function (generalized linear model)—appropriate for continuous outcomes and longitudinal data. An exchangeable correlation structure was specified between observations within individuals, and robust standard errors were applied for variance correction. The GEE method extends standard regression analysis by accounting for the correlation between repeated measures, allows for within-subject missing data, and is suitable for estimating population-averaged effects over time using longitudinal data.

To test the hypothesis that IPV has differential effects on QoL by sex, an interaction model was used between the exposure variable and sex, producing β coefficients and 95% CIs for each group by alternating the coding of sex (male = 0, female = 1; male = 1, female = 0). In the adjusted analyses, variables indicated by the DAG were included in each model. For the suffered IPV model, social support was not available in the first wave and was therefore not included in the main model. Although no prior studies supported including cognitive impairment and ADL dependence in the adjustment model for perpetrated IPV, a sensitivity analysis was conducted to test the robustness of results by adding these variables. The level of statistical significance was set at 5% for all associations. To assess the statistical significance of sex differences, the Omnibus post-test (“testparm”) was used. All statistical analyses were performed using Stata software, version 14.0 (StataCorp, College Station, TX, USA). All analyses accounted for the complex sampling design, which included 10 clusters, and sampling weights were applied using the svy command.

Ethical Considerations

The study was approved by a Research Ethics Committee (approval number blinded for review). All participants provided written informed consent at each wave of the study.

Results

The sample included 651 participants in wave 2, 739 in wave 3, and 404 in wave 5 (Figure 3), with a predominance of men (55.1%, 55.6%, and 55.3%, respectively). Tables 1 and 2 present the sociodemographic and health characteristics of female and male participants, respectively, across the three waves of the EpiFloripa Aging Cohort Study. Mean QoL scores are described according to these characteristics.

Among women (Table 1), most participants were aged 60–69 years in wave 2 (47.3%) and 70–79 years in waves 3 and 5 (51.8% and 60.8%, respectively). The mean QoL score remained similar across waves, showing a slight decline in wave 5 (45.7 ± 7.3). The proportion of participants reporting suffered IPV decreased over time, being highest in wave 3 (47.5%) and lowest in wave 5 (18.2%). Perpetrated IPV occurred in proportions similar to suffered IPV, with the highest frequency in wave 3 (48.4%) and the lowest in wave 5 (18.1%). Across all three waves, older women who never consumed alcohol, had ADL limitations, cognitive impairment, or depressive symptoms showed significantly lower QoL scores ($p < 0.05$). Advancing age was associated with lower QoL only in wave 5, low education with lower QoL in waves 3 and 5, and low income with lower QoL in wave 2 only. Women who perpetrated IPV had lower QoL scores in wave 2 (44.2 ± 7.9).

Table 1. Sociodemographic and Health Characteristics Across Study Waves and Mean CASP-19 Scores Among Female Participants in the EpiFloripa Aging Cohort Study

	Wave 2 (2013– 2014) N (%)	CASP- 19 Mean (SD)	Wave 3 (2017– 2019) N (%)	CASP- 19 Mean (SD)	Wave 5 (2023– 2024) N (%)	CASP- 19 Mean (SD)
<i>Total</i>	311 (100%)	46.3 (7.7)	320 (100%)	46.7 (8.1)	172 (100%)	45.7 (7.3)
<i>Age group</i>						
60–69 years	148 (47.3)	47.0 (7.6)	136 (35.1)	45.7 (10.0)	51 (24.0)	45.8 (8.6) ¹
70–79 years	129 (41.8)	45.7 (7.7)	146 (51.7)	47.4 (7.1)	87 (60.8)	46.4 (5.7) ¹
≥ 80 years	34 (10.9)	46.0 (7.5)	38 (13.2)	46.9 (6.7)	34 (15.2)	42.8 (9.5) ¹
<i>Education (years)</i>						
≤ 4	119 (34.9)	45.6 (8.1)	99 (30.6)	44.2 (8.1) ¹	34 (24.5)	41.2 (9.0) ¹
5–11	117 (39.1)	46.4 (8.0)	119 (36.2)	46.7 (8.3) ¹	77 (43.4)	47.7 (5.5) ¹
≥ 12	75 (26.0)	47.3 (6.5)	102 (33.2)	49.1 (7.0) ¹	61 (32.1)	46.4 (6.0) ¹
<i>Household income (minimum wages)</i>						
≤ 1	160 (55.0)	45.8 (7.9) ¹	113 (30.3)	46.5 (9.0)	110 (61.0)	45.1 (8.3)
1–5	76 (26.1)	46.1 (7.0) ¹	58 (19.5)	45.4 (9.2)	54 (36.9)	46.6 (5.1)
> 5	55 (18.9)	48.1 (6.8) ¹	146 (50.3)	48.0 (6.2)	7 (2.1)	48.8 (7.2)
<i>Alcohol consumption</i>						
Never	203 (63.6)	45.2 (8.0) ¹	200 (63.4)	46.7 (8.1) ¹	141 (85.2)	45.8 (7.9) ¹
Moderate	82 (26.9)	48.7 (6.8) ¹	80 (23.8)	48.0 (7.9) ¹	23 (13.9)	46.1 (7.0) ¹
High	26 (9.5)	47.5 (5.9) ¹	40 (12.8)	47.1 (4.9) ¹	4 (0.9)	48.1 (6.8) ¹
<i>ADL limitations</i>						
None	83 (26.5)	50.5 (5.4) ¹	104 (28.9)	51.8 (5.3) ¹	58 (26.4)	50.9 (3.1) ¹

Mild (1–3 ADLs)	139 (47.2)	46.8 (6.9) ¹	121 (43.1)	47.0 (6.6) ¹	56 (37.5)	46.0 (5.7) ¹
Moderate/ severe (≥ 4 ADLs)	89 (26.3)	41.2 (8.0) ¹	94 (28.0)	40.4 (8.6) ¹	58 (36.2)	41.5 (8.1) ¹
Cognitive impairment						
No	246 (80.0)	46.8 (7.6) ²	282 (88.2)	47.5 (7.7) ²	123 (80.4)	48.3 (4.7) ²
Yes	62 (20.0)	44.7 (7.6) ²	37 (11.8)	41.1 (8.2) ²	46 (19.6)	34.9 (7.0) ²
Depressive symptoms						
No	245 (80.9)	48.3 (6.3) ²	259 (90.1)	48.4 (6.5) ²	125 (81.1)	47.2 (5.0) ²
Yes	65 (19.1)	37.9 (7.1) ²	43 (9.9)	33.3 (9.8) ²	41 (18.9)	40.0 (12.2) ²
Suffered IPV						
No	163 (53.5)	47.4 (7.1) ²	175 (52.5)	47.0 (7.8)	123 (81.8)	46.6 (6.2) ²
Yes	148 (46.5)	45.1 (8.1) ²	145 (47.5)	46.4 (8.3)	49 (18.2)	41.4 (10.8) ²
Perpetrated IPV						
No	167 (54.9)	48.1 (7.0) ²	163 (51.6)	47.1 (7.6)	122 (81.9)	46.6 (6.1)
Yes	144 (45.1)	44.2 (7.9) ²	157 (48.4)	46.3 (8.5)	50 (18.1)	41.8 (11.5)

¹ p < .05, ANOVA test. ² p < .05, Student's t test.

ADL = activities of daily living; IPV = intimate partner violence.

Among men (Table 2), most participants were aged 70–79 years in waves 2, 3, and 5 (45.1%, 45.1%, and 59.0%, respectively). The mean QoL score was similar across waves, with a slight increase in wave 3 (47.3 ± 8.0), slightly higher than that observed among women. The proportion of participants reporting suffered and perpetrated IPV decreased over time, from 48.3% and 50.3% in wave 2 to 18.6% and 22.0% in wave 5, respectively. Across all waves, men who never consumed alcohol, had ADL limitations, cognitive impairment, or depressive symptoms showed lower QoL scores. Older age and lower education were associated with reduced QoL in wave 2, and lower income was associated with reduced QoL in waves 2 and 3. Men who suffered IPV showed lower QoL scores in waves 2 and 3, whereas those who perpetrated IPV showed lower QoL scores in waves 2 and 5.

Table 2. Sociodemographic and Health Characteristics Across Study Waves and Mean CASP-19 Scores Among Male Participants in the EpiFloripa Aging Cohort Study

	Wave 2 (2013– 2014) N (%)	CASP- 19 Mean (SD)	Wave 3 (2017– 2019) N (%)	CASP- 19 Mean (SD)	Wave 5 (2023– 2024) N (%)	CASP- 19 Mean (SD)
Total	340 (100%)	46.9 (7.3)	419 (100%)	47.3 (8.0)	232 (100%)	47.0 (7.4)
Age group						
60–69 years	135 (37.5)	48.2 (7.1)	172 (35.7)	47.9 (9.0) ¹	61 (14.5)	47.2 (7.5) ¹
70–79 years	146 (45.1)	46.4 (6.9)	175 (45.1)	47.6 (7.4) ¹	108 (59.0)	48.1 (6.8) ¹
≥ 80 years	59 (17.4)	45.6 (8.4)	72 (19.1)	45.2 (7.5) ¹	63 (26.4)	44.5 (7.6) ¹
Education (years)						
≤ 4	113 (28.3)	45.9 (8.7)	111 (22.7)	44.5 (9.7) ¹	52 (20.8)	42.5 (10.5) ¹
5–11	107 (34.8)	46.4 (7.5)	130 (31.5)	46.3 (8.3) ¹	64 (21.7)	46.8 (7.5) ¹
≥ 12	120 (36.9)	48.2 (6.0)	176 (45.7)	49.6 (6.2) ¹	116 (57.5)	48.7 (5.3) ¹
Household income (minimum wages)						
≤ 1	146 (40.2)	45.6 (8.0) ¹	126 (27.4)	46.0 (8.5)	116 (50.5)	45.5 (8.1)
1–5	115 (33.6)	47.3 (7.3) ¹	131 (32.0)	47.5 (7.7)	76 (34.8)	47.2 (6.5)
> 5	79 (26.2)	48.5 (6.7) ¹	162 (40.6)	48.8 (6.4)	40 (14.7)	48.5 (6.2)
Alcohol consumption						
Never	128 (35.1)	45.4 (8.0) ¹	172 (37.9)	43.5 (10.7) ¹	157 (70.4)	44.5 (9.7) ¹
Moderate	95 (29.3)	46.0 (6.9) ¹	93 (23.3)	48.6 (6.4) ¹	36 (14.8)	46.3 (8.3) ¹
High	117 (35.5)	48.2 (6.1) ¹	154 (38.8)	48.9 (5.9) ¹	38 (14.9)	49.6 (6.2) ¹
ADL limitations						
None	111 (34.5)	51.2 (5.5) ¹	131 (33.7)	51.0 (5.7) ¹	78 (28.2)	51.5 (4.8) ¹

Mild (1–3 ADLs)	149 (46.8)	46.6 (6.8) ¹	176 (46.2)	47.1 (7.1) ¹	94 (42.2)	46.8 (6.3) ¹
Moderate/severe (≥ 4 ADLs)	80 (18.7)	40.5 (7.8) ¹	112 (20.1)	41.2 (8.3) ¹	60 (29.6)	41.0 (8.0) ¹
Cognitive impairment						
No	280 (82.6)	47.4 (7.2) ²	358 (89.3)	48.3 (7.5) ²	193 (82.5)	48.7 (6.0) ²
Yes	59 (17.4)	43.5 (8.3) ²	43 (10.7)	42.0 (8.0) ²	39 (17.5)	39.6 (7.5) ²
Depressive symptoms						
No	287 (84.6)	48.1 (6.3) ²	362 (91.5)	48.8 (6.7) ²	187 (81.3)	47.8 (5.9) ²
Yes	53 (15.4)	37.5 (8.3) ²	57 (8.5)	35.7 (8.6) ²	45 (18.7)	38.2 (8.5) ²
Suffered IPV						
No	176 (51.7)	47.9 (7.0) ²	182 (51.3)	47.6 (7.7)	189 (81.4)	47.9 (6.2) ²
Yes	164 (48.3)	45.6 (8.0) ²	173 (48.7)	45.4 (8.3)	43 (18.6)	42.8 (9.8) ²
Perpetrated IPV						
No	169 (49.7)	48.2 (7.1) ²	175 (47.9)	47.8 (7.4)	181 (78.0)	48.1 (6.3)
Yes	171 (50.3)	44.5 (8.2) ²	190 (52.1)	45.1 (8.5)	51 (22.0)	43.7 (8.9)

¹ p < 0.05, ANOVA test. ² p < 0.05, Student's t test.

ADL = activities of daily living; IPV = intimate partner violence.

Regarding changes in IPV status over time (Table 3), among females, 25.0% of those who had not previously suffered violence began to experience it, whereas 50.0% of those who had suffered violence stopped over time. Similarly, among women who had not perpetrated IPV, 25.3% began to do so, and 47.2% ceased perpetrating violence during the period. Among males, 21.2% began to experience violence, while 54.4% stopped experiencing it. With respect to perpetrated violence, 30.6% of men began to perpetrate IPV, and 53.2% stopped doing so over the same period.

Table 3. Change in Intimate Partner Violence (IPV) Status Between Waves by Sex in the EpiFloripa Aging Cohort Study

	Women			Men		
	Remained in the same category (%)	Changed to yes (%)	Changed to no (%)	Remained in the same category (%)	Changed to yes (%)	Changed to no (%)
<i>Suffered IPV</i>						
No	75.0	25.0	–	78.8	21.2	–
Yes	50.0	–	50.0	45.7	–	54.4
<i>Perpetrated IPV</i>						
No	74.7	25.3	–	69.4	30.6	–
Yes	52.8	–	47.2	46.8	–	53.2

Analysis performed using a generalization of the tabulate command.
 IPV = Intimate Partner Violence.

Table 4 presents the regression results for the association between suffered and perpetrated IPV and quality of life (QoL) among females and males. A significant negative association was observed between perpetrated IPV and QoL among females, which remained even after adjustment for confounding variables ($\beta = -2.12$; $p = 0.001$). Among males, however, a non-significant trend toward higher QoL associated with IPV was identified ($\beta = 0.22$; $p = 0.729$). The interaction between sex and perpetrated violence was statistically significant (p for interaction = 0.007), with the Omnibus test confirming a global difference in effects between groups ($p = 0.008$). In the analysis of suffered IPV, a non-significant trend toward lower QoL was observed among females and toward higher QoL among males.

Table 4. Crude and adjusted analyses of the association between intimate partner violence (IPV) suffered and perpetrated, and quality of life, with interaction by sex, in the EpiFloripa Aging Study.

	Crude analysis			Adjusted analysis		
	β	95% CI	p	β	95% CI	p
	1	–	–	1	–	–
IPV suffered ¹						
Female	-1.11	-2.37; 0.15	0.083	-1.14	-2.33; 0.06	0.062
Male	0.59	-0.74; 1.92	0.385	0.24	-0.84; 1.32	0.662
IPV perpetrated ²						
Female	-1.78	-3.05; 0.50	0.006	-2.12 ³	-3.33; -0.90	0.001
Male	0.11	-1.13; 1.35	0.859	0.22	-1.00; 1.43	0.729

¹ Adjusted for age, education, income, alcohol use, depressive symptoms, dependency in activities of daily living (ADL), and cognitive impairment.

² Adjusted for age, education, income, alcohol use, and depressive symptoms.

³ Difference between sexes is statistically significant (Interaction $p = 0.007$; Omnibus test $p = 0.008$). $N = 1,086$.

To investigate potential confounding by limitations in activities of daily living (ADLs) and probable cognitive impairment, we conducted a sensitivity analysis including these variables (Table 5). After this adjustment, the association between perpetrated IPV and QoL became stronger among those exposed to the tested variables, with an average reduction of 2.07 points in CASP-19 scores among exposed females ($p = 0.001$). Among males, the effect remained non-significant but showed an increase in the regression coefficient ($\beta = 0.31$; $p = 0.584$).

Table 5. Sensitivity test¹ for the analysis of the association between intimate partner violence (IPV) perpetrated and quality of life, with interaction by sex, in the EpiFloripa Aging Study.

Adjusted analysis			
	β	95% CI	p
	1	–	–
IPV perpetrated ²			
Female	-2.07 ³	-3.23 to -0.90	0.001
Male	0.31	-0.79 to 1.41	0.584

¹ Sensitivity analysis including dependency in activities of daily living (ADL) and cognitive impairment.

² Adjusted for age, education, income, alcohol use, depressive symptoms, dependency in ADL, and cognitive impairment.

³ Difference between sexes is statistically significant (Interaction $p = 0.007$; Omnibus test $p = 0.008$). $N = 1,086$.

Discussion

The findings of this longitudinal study indicate that both suffered and perpetrated IPV occur in comparable proportions among older women and men; however, their effects on quality of life (QoL) differ substantially by sex. Perpetrating IPV was associated with poorer QoL among women throughout the 10-year follow-up, whereas no significant association was observed among men. These findings

suggest that gender-related social roles and inequalities continue to shape the consequences of IPV in later life.

Our results are consistent with recent longitudinal evidence showing poorer psychosocial well-being and QoL among women exposed to IPV, while associations among men are weaker or absent (Taverna et al., 2025). Likewise, previous longitudinal studies have demonstrated that IPV has persistent adverse effects on women's physical and mental health across the life course (Loxton et al., 2017).

The high prevalence of IPV observed in both sexes is consistent with recent evidence showing that emotional IPV affects approximately half of women and men during their lifetime (Spencer et al., 2024). Previous studies have identified adverse childhood experiences, mental health disorders, alcohol use, and other psychosocial factors as important determinants of both victimization and perpetration (Spencer et al., 2024). Nevertheless, women are more likely to experience victimization alone, whereas men more frequently perpetrate violence without reporting victimization (Clemens et al., 2023).

The poorer QoL observed among women who perpetrated IPV may reflect the cumulative effects of gender inequality and the social stigma associated with female violence. Women who use violence often report histories of victimization, self-defense, or responses to persistent relationship conflict rather than coercive control (Damant et al., 2023; Swan et al., 2008). Deviating from traditional expectations of femininity may increase feelings of blame, isolation, and psychological distress, contributing to lower QoL (Ahmed et al., 2024). Furthermore, many women who perpetrate IPV have also experienced violence from their partners, reinforcing the need to interpret female perpetration within the broader context of relational dynamics rather than as an isolated behavior (Dowd & Lambo, 2020).

In contrast, the absence of a significant association among men may reflect the normalization of violence within patriarchal gender norms. Qualitative studies suggest that male violence is often socially legitimized as an expression of authority and control, potentially reducing awareness of its personal consequences (Oddone, 2020; Sikweyiya et al., 2020). Although speculative, this interpretation is consistent with the non-significant positive trend observed among men in the present study.

These findings support the adoption of gender-sensitive and life-course approaches to IPV prevention and care. Because abusive relationships may persist or emerge in older age, health professionals should be prepared to identify IPV using validated instruments and provide appropriate referral and support. Interventions should also recognize that women who perpetrate violence may have different motivations and care needs than men, requiring context-specific approaches (Alsina et al., 2024; Li et al., 2024).

This study has some limitations. IPV was self-reported and may have been underreported, particularly regarding perpetration. Social support was unavailable in the first follow-up wave and could not be included in the primary adjustment model, leaving the possibility of residual confounding. In addition, findings are limited to an urban population in southern Brazil. Nevertheless, the population-based cohort, repeated measures over 10 years, and longitudinal analytical approach strengthen the robustness and internal validity of the findings.

Conclusions

This longitudinal study demonstrated that IPV occurs with similar prevalence among older women and men; however, its effects on quality of life (QoL) differ by sex. Over the 10-year follow-up period, only women who perpetrated IPV showed reduced QoL scores, whereas men exhibited a slight but non-significant increase.

In contrast, men showed an opposite trend, underscoring sex-based differences in how IPV relates to well-being. These findings highlight the importance of understanding intimate partner violence as a dynamic and relational phenomenon, deeply influenced by gender norms, with long-term negative effects on women's QoL over the course of a decade.

Declarations

Author Contribution

DW conceived and designed the study, performed the statistical analyses, interpreted the data, and wrote the first draft of the manuscript. SRL contributed to the study conception, supervised the research, critically revised the manuscript for important intellectual content, and contributed to data interpretation. Both authors reviewed, approved the final version of the manuscript, and agree to be accountable for all aspects of the work.

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Figures

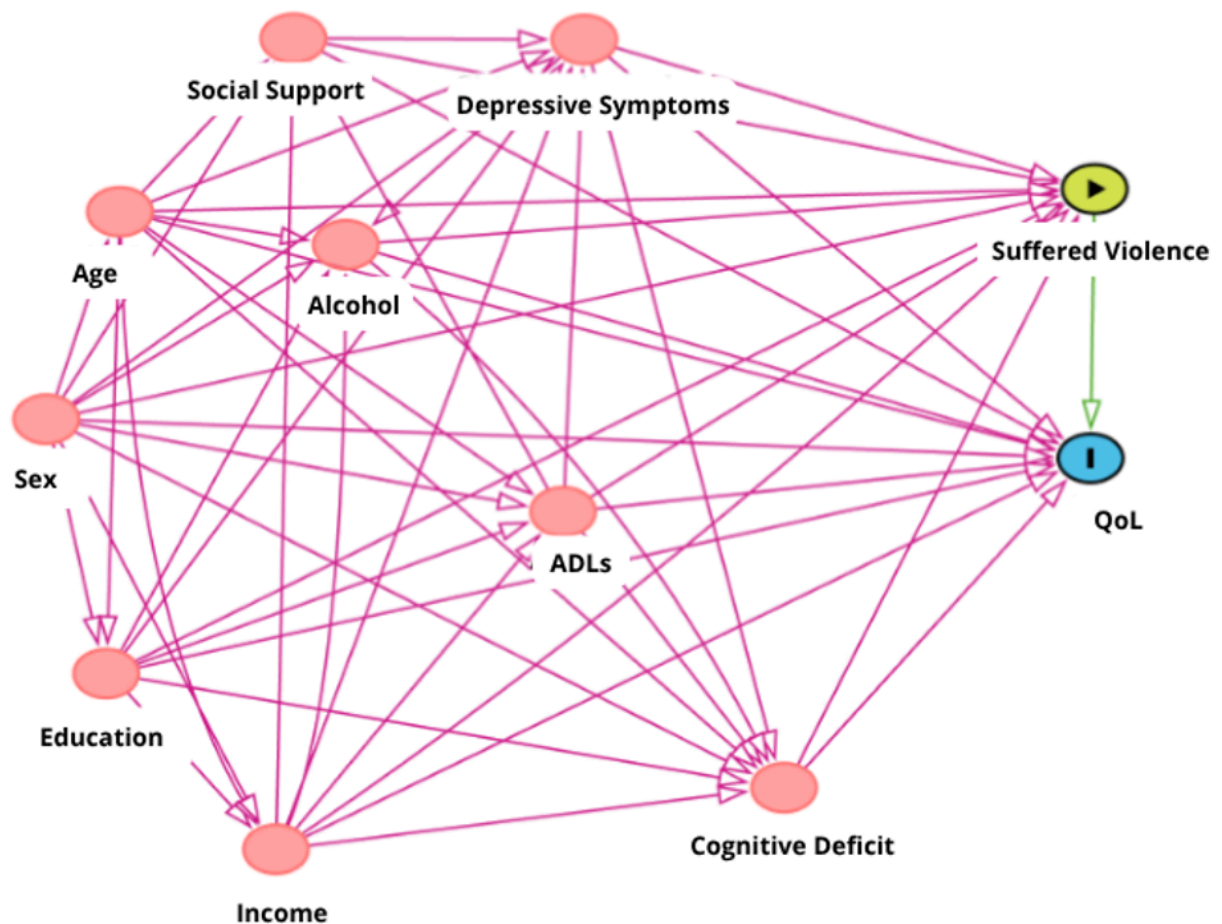


Figure 1

Directed Acyclic Graph representing the theoretical model of the minimum adjustment set of covariates for the association between suffered violence and quality of life.

The directed acyclic graph (DAG) was used to determine the minimum sufficient set of confounding covariates, based on the literature, to assess the association between suffered violence (exposure) – represented by the play icon – and quality of life (QoL, outcome) – represented by the stop icon. Variables identified by red circles are antecedents of both the exposure and the outcome. The arrows represent causal relationships among variables, where red arrows indicate biasing paths, and the green arrow represents the causal pathway between the exposure and the outcome. ADL, activities of daily living.

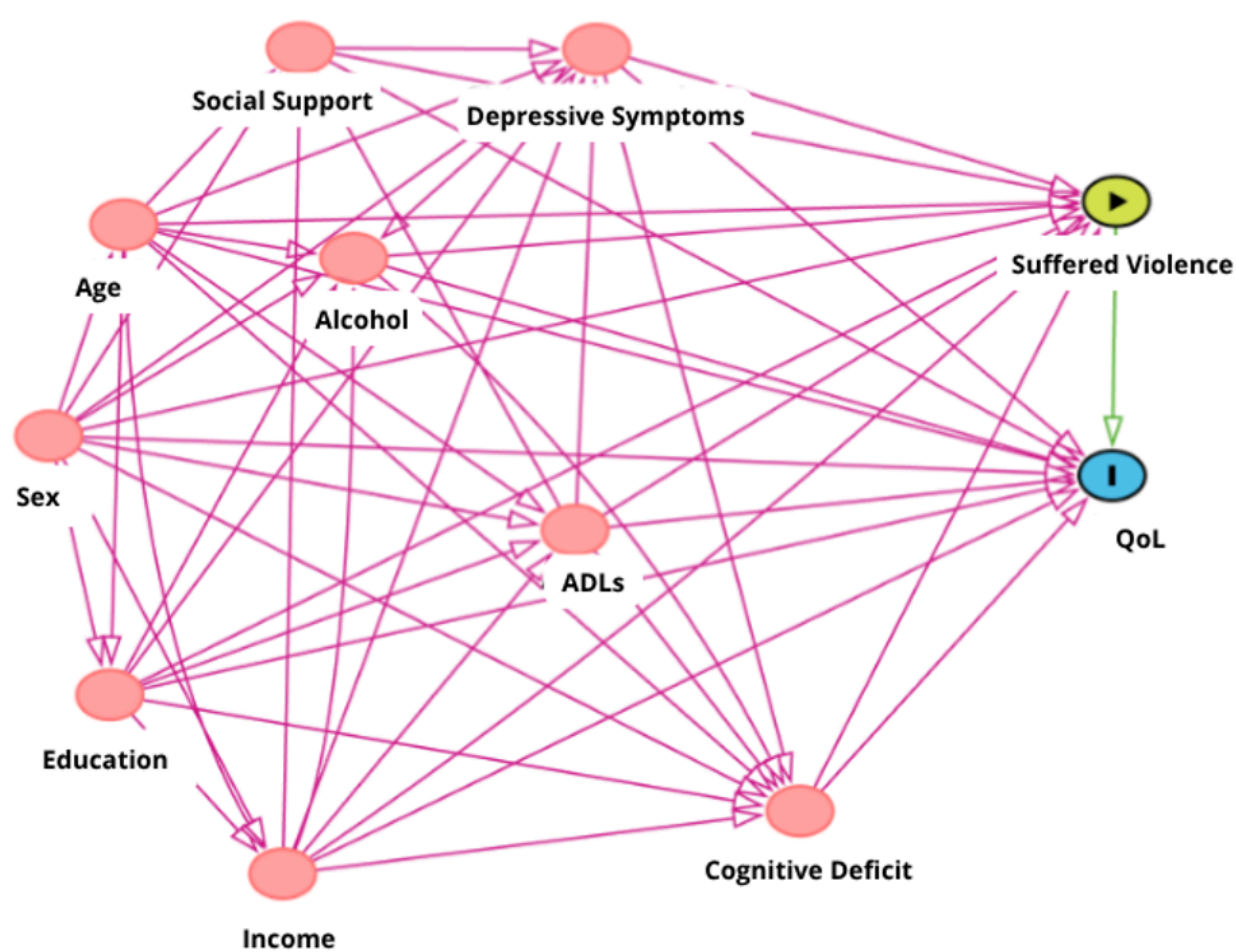


Figure 2

Directed Acyclic Graph representing the theoretical model of the minimum adjustment set of covariates for the association between perpetrated violence and quality of life. The directed acyclic graph (DAG) was used to determine the minimum sufficient set of confounding covariates, based on the literature, to assess the association between perpetrated violence (exposure) – represented by the play

icon – and quality of life (QoL, outcome) – represented by the stop icon. Variables identified by red circles are antecedents of both the exposure and the outcome. The arrows represent causal relationships among variables, where red arrows indicate biasing paths, and the green arrow represents the causal pathway between the exposure and the outcome. ADL, activities of daily living.

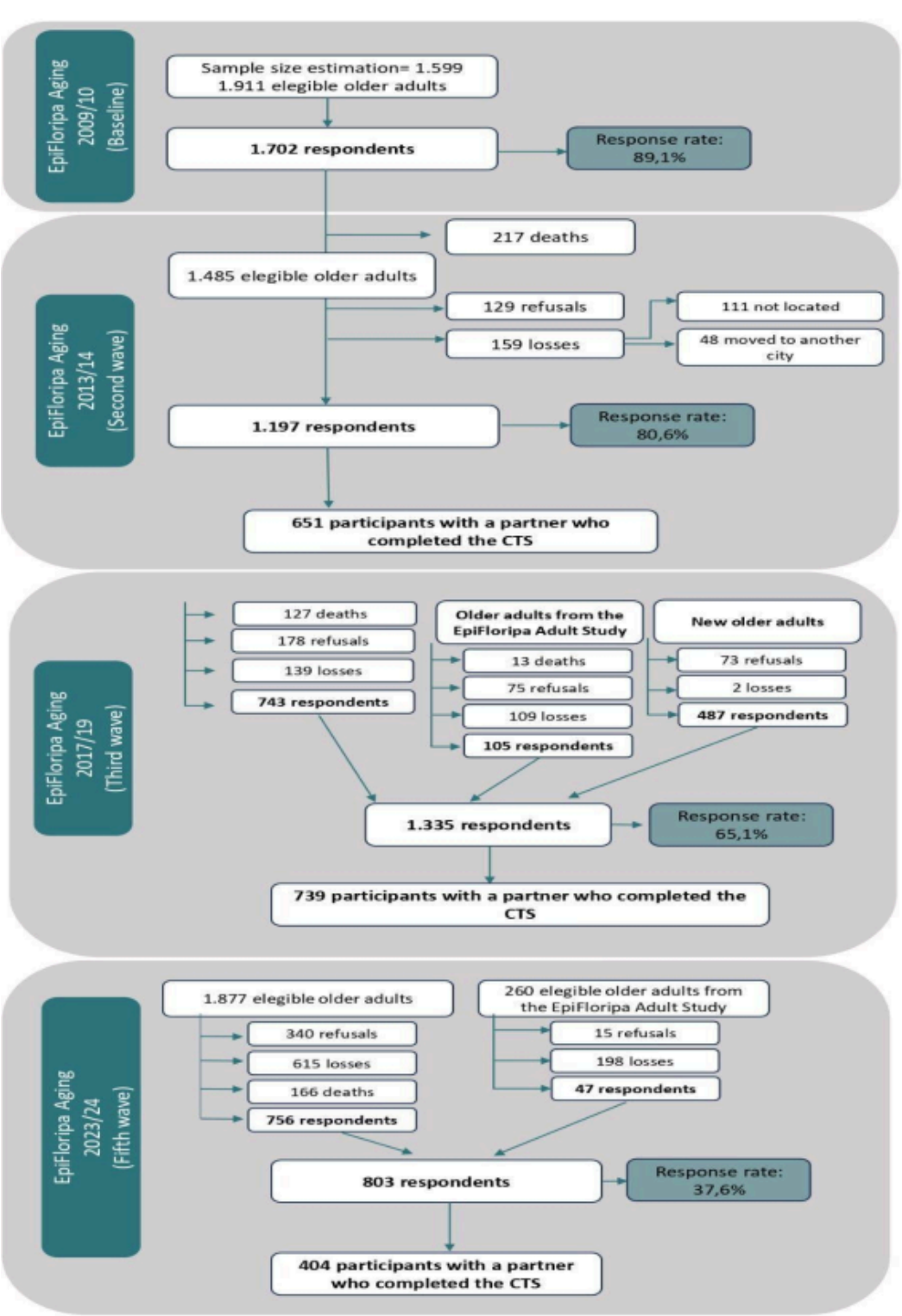


Figure 3

Flowchart of sample selection at baseline and follow-up waves. EpiFloripa Aging Study

