

Alcohol use and sociodemographic risk factors for severe intimate partner violence among women in Timor-Leste

Amin Zakaria^{1*}, Yuni Asri¹, Heny Nurma Yunita¹, Vendi Eko Kurniawan², Thomas Senghore³, Muhammad Solihuddin Muhtar⁴, Christopher Blair⁵

¹ Department of Nursing, Faculty of Health Science, Institute of Technology Science and Health, Dr Soepraoen Kesdam V/Brawijaya Hospital, Malang, Indonesia

² Department of Nursing, Sekolah Tinggi Ilmu Kesehatan Husada Jombang

³ Department of Nursing and Reproductive Health and the Department of Public and Environmental Health, University of the Gambia

⁴ International Ph.D. Program in Biotech and Healthcare Management, Taipei Medical University, New Taipei City, Taiwan

⁵ Program Manager, Malawi AIDS Counselling and Resource Organization (MACRO), Lilongwe, Malawi

OPEN ACCESS

Jurnal Keperawatan Padjadjaran (JKP)

Volume 13(2), 160-171
© The Author(s) 2025
<http://dx.doi.org/10.24198/jkp.v13i2.2788>

Article Info

Received : April 11, 2025
Revised : August 11, 2025
Accepted : August 21, 2025
Published : August 30, 2025

Corresponding author

Amin Zakaria*
Department of Nursing, Faculty of Health Science, Institute of Technology Science and Health, Dr Soepraoen Kesdam V/Brawijaya Hospital, Malang, Indonesia; Jl. S. Supriadi No.22, Sukun, Kec. Sukun, Kota Malang, Jawa Timur 65147, Phone: 081-330045895, E-mail: amin@itsk-soepraoen.ac.id

Citation

Zakaria, A., Asri, Y., Yunita, H. N., Kurniawan, V. E., Senghore, T., Muhtar, M. S., & Blair, C. (2025). Alcohol use and sociodemographic risk factors for severe intimate partner violence among women in Timor-Leste. *Jurnal Keperawatan Padjadjaran*, 13(2), 160-171. <http://dx.doi.org/10.24198/jkp.v13i2.2788>

Website

<http://jkp.fkep.unpad.ac.id/index.php/jkp>

This is an **Open Access** article distributed under the terms of the [Creative Commons Attribution-Non-Commercial 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).

E-ISSN: 2442-7276

P-ISSN: 2338-5324

Abstract

Background: Intimate partner violence (IPV) remains a significant public health concern in Timor-Leste, with sociocultural norms, economic disparities, and partner behaviors contributing to its prevalence. Understanding the associated risk factors is crucial for informing prevention strategies.

Purpose: This study aimed to examine sociodemographic and behavioral factors associated with severe IPV among women in Timor-Leste.

Methods: A cross-sectional analysis was conducted using data from 3,694 women aged 15–49 years who participated in the 2016 Timor-Leste Demographic and Health Survey (DHS). The outcome variable was self-reported severe IPV. Independent variables included age, marital status, education, household wealth index, place of residence, geographic region, and husband/partner's alcohol consumption. Weighted logistic regression models were used to calculate crude and adjusted odds ratios (COR, AOR) with 95% confidence intervals (CI).

Results: Severe IPV was significantly associated with being aged 25–34 (AOR = 1.74; 95% CI: 1.19–2.52), being unmarried/widowed/divorced (AOR = 2.56; 95% CI: 1.33–4.92), and having a partner who consumed alcohol (AOR = 2.41; 95% CI: 1.85–3.11). Higher education and better economic status were protective against IPV.

Conclusion: Alcohol consumption by partners, lower education levels, and economic disadvantage are key risk factors for severe IPV in Timor-Leste. Policies targeting alcohol reduction, women's empowerment, and tailored regional interventions are essential to mitigate IPV and its health impacts.

Keywords: alcohol use, demographic and health surveys; intimate partner violence; socioeconomic factors; Timor-Leste

Introduction

Intimate Partner Violence (IPV) remains a critical public health concern worldwide, affecting nearly one in three women during their lifetime (WHO, 2021). IPV encompasses physical, sexual, and emotional abuse perpetrated by a current or former partner and is associated with adverse health outcomes, including injury, depression, and reproductive health complications (Hailu et al., 2023; Kirkbride et al., 2024; Rollero & Speranza, 2020). In low- and middle-income countries (LMICs), the burden of IPV is particularly severe due to entrenched gender inequalities, limited legal protections, and inadequate access to support services (Aboagye, 2023; Coll et al., 2020; Gunarathne et al., 2023).

Timor-Leste, a nation emerging from conflict and characterized by strong patriarchal traditions, has one of the highest rates of intimate partner violence in Southeast Asia. The Demographic and Health Survey (DHS)

reveals that a considerable number of women report enduring severe violence from their (Jean Simon et al., 2025; Manna et al., 2024; Yount et al., 2022). The sociocultural context, shaped by traditional gender roles and inadequate legal protection for women, exacerbates the risk of IPV (González & Rodríguez-Planas, 2020; Gunarathne et al., 2023). In Timor-Leste, women encounter additional obstacles in accessing support services due to inadequate infrastructure and resources, which further sustain the cycle of violence. Consequently, it is essential to understand the factors linked to IPV to create effective strategies to reduce its occurrence and aid survivors. Previous research has identified several sociodemographic and behavioral factors contributing to IPV, including age, marital status, education, economic status, and alcohol consumption by partners (Aboagye et al., 2022; Tolstrup et al., 2025). For example, younger women, those with lower educational attainment, and women from economically disadvantaged households are often at higher risk of experiencing IPV (Aboagye et al., 2022; Ikuteyijo et al., 2024; Klencakova et al., 2023). Additionally, alcohol consumption by partners is a well-documented trigger for IPV, as it can escalate conflict and reduce self-control (Sáez et al., 2020; O. Shubina et al., 2023; Sontate et al., 2021). In Timor-Leste, alcohol consumption is a particularly relevant factor due to the social norms surrounding drinking that can worsen household tensions.

However, the way in which these elements interact with the cultural dynamics specific to Timor-Leste has not been thoroughly examined. Current research shows a strong link between alcohol use and both perpetration and experience of intimate partner violence (IPV) (Gibbs et al., 2024; Shorey et al., 2025). Research indicates that consuming too much alcohol can lead to impaired decision-making and heightened aggression, which in turn raises the chances of violent events occurring (Ohurira et al., 2022). Interventions aimed at reducing alcohol availability have shown the potential to decrease IPV rates by limiting the opportunities for excessive drinking (Ghoshal, 2024). Furthermore, the presence of alcohol outlets in a community has been associated with an increase in IPV-related emergency department visits, emphasizing the need for targeted public health strategies (Forbes et al., 2024). This study focused on exploring the sociodemographic and behavioral elements linked to severe intimate partner violence (IPV) in Timor-Leste, utilizing data from the 2016 Demographic and Health Survey (DHS). This study aimed to identify the primary risk factors for IPV by analyzing factors such as age, marital status, education, economic status, regional differences, and alcohol use by husbands or partners. Understanding these factors is essential for policymakers and public health practitioners to design effective prevention and support strategies tailored to the unique sociocultural context of Timor-Leste (Shwartz et al., 2020). By addressing these risk factors, it is possible to reduce the significant

impact of IPV and enhance the overall well-being of women in the nation.

Materials and Methods

Design

This study utilized a cross-sectional design using data from the 2016 Demographic and Health Surveys (DHS) conducted in Timor-Leste. The DHS is a nationally representative survey that collects comprehensive data on population health indicators, including maternal and child health, fertility, and intimate partner violence (IPV). The data collection employed standardized protocols and tools, ensuring data comparability and reliability across different regions and demographic groups.

Sample and setting

The study included a total of 3,694 women aged 15–49 who participated in the 2016 Timor-Leste DHS. Women were selected using a two-stage stratified cluster sampling technique to ensure a nationally representative sample. Eligible participants were those who provided complete responses to the IPV-related questions in the survey.

Variable and Instruments

The DHS questionnaire was used to collect data on sociodemographic characteristics, marital status, educational attainment, wealth index, and partner behaviors. The outcome variable of interest in this study was the experience of severe violence from a husband or partner. Severe violence was defined based on physical acts, such as being hit, kicked, or choked, as reported by women. Independent variables included age (15–24, 25–34, and ≥35 years), marital status (currently in union, never married, widowed/divorced), educational level (no education, primary, secondary, higher), wealth index (poorest, poor, middle, rich, richest), residence (urban, rural), region, and husband/partner alcohol consumption (yes/no).

Data collection

Data collection for the 2016 Timor-Leste DHS was conducted by trained fieldworkers who received extensive instruction in handling sensitive topics such as IPV. Interviews were conducted face-to-face using a standardized and validated DHS questionnaire. To ensure confidentiality and privacy, interviews took place in a private setting without the presence of family members, especially in communal or rural households. Female interviewers were primarily assigned to administer the domestic violence module to minimize distress and promote disclosure. The average duration of each interview was approximately 45 minutes to one hour, allowing adequate time for rapport-building and accurate data collection.

Data analysis

Data analysis was conducted using Stata version

Table 1. Frequency Distribution of Respondent Characteristics among women in Timor Leste (N = 3.694)

Variable	Frequency (n)	Percent (%)
Age (Years)		
15-24	538	14.9
25-34	1.583	43.5
>35	1.573	41.6
Marital Status		
Currently in union	3.573	96.7
Never in a union/widowed/divorced	121	3.3
Education Level		
No education	1.097	30.2
Primary	708	19.3
Secondary	1.632	43.4
Higher	257	7.1
Wealth index combined		
Poorest	734	20.1
Poor	768	21.0
Middle	805	21.1
Rich	777	20.5
Richest	610	17.3
Residence		
Urban	1.025	24.4
Rural	2.669	75.6
Region		
Aileu	254	3.4
Ainaro	255	4.6
Baucau	277	7.2
Bobonaro	317	8.4
Covalima	257	6.4
Dili	365	18.5
Ermera	312	10.9
Lautem	287	6.0
Liqui	269	6.0
Manatuto	269	4.5
Manufahi	328	5.4
Oecussi	227	5.5
Viqueque	277	6.9
Husband/partner drinks alcohol		
No	2.406	65.1
Yes	1.288	34.9

Table 2. Bivariate analysis of severe intimate partner violence by sociodemographic factors and partner alcohol use (N = 3,694)

Variable	Experienced any severe violence by husband/partner		p-value
	No	Yes	
	N (%)		
Age (Years)			0.003
15-24	483(13.5)	55(1.4)	
25-34	1.341(36.3)	242(7.3)	
>=35	1.380(35.8)	193(5.8)	
Marital Status			0.011
Currently in union	3.111(83.1)	462(13.6)	
Never in a union/widowed/divorced	93(2.4)	28(0.9)	
Education Level			0.001
No education	902(23.8)	195(6.4)	
Primary	604(16.2)	104(3.1)	
Secondary	1.463(38.9)	169(4.5)	
Higher	235(6.6)	22(0.5)	
Wealth index combined			0.001
Poorest	586(15.8)	148(4.8)	
Poor	655(17.6)	113(3.4)	
Middle	692(17.9)	113(3.2)	
Rich	704(17.6)	73(1.9)	
Richest	567(16.5)	43(1.1)	
Residence			0.001
Urban	933(22.3)	92(2.1)	
Rural	2.271(63.2)	398(12.4)	
Region			0.001
Aileu	237(3.2)	17(0.2)	
Ainaro	216(3.9)	39(0.7)	
Baucau	250(6.1)	27(1.1)	
Bobonaro	286(8.3)	31(0.1)	
Covalima	224(5.3)	33(1.1)	
Dili	331(16.8)	34(1.7)	
Ermera	219(7.3)	93(3.6)	
Lautem	260(5.4)	27(0.6)	
Liqui	218(4.9)	51(1.1)	
Manatuto	240(4.0)	29(0.5)	
Manufahi	292(4.7)	36(0.7)	
Oecussi	181(5.4)	46(0.1)	
Viqueque	250(6.1)	27(0.8)	
Husband/partner drinks alcohol			0.001
No	2.194(58.1)	212(6.1)	
Yes	1.010(27.9)	278(8.4)	

Note: * p<0.05.

Table 3. Multivariable logistic regression of factors associated with severe intimate partner violence among women in Timor-Leste

Variables	Model 1	Model 2
	COR (95% CI)	AOR(95% CI)
Age (Years)		
15-24	Reference	Reference
25-34	1.87(1.30-2.68)**	1.74(1.19-2.52)**
>=35	1.52(1.06-2.18)*	1.34(0.90-1.97)
Marital Status		
Currently in union	Reference	Reference
Never in a union/widowed/divorced	2.16(1.17-3.98)*	2.56(1.33-4.92)*
Education Level		
No education	Reference	Reference
Primary	0.71(0.52-0.97)*	0.88(0.63-1.21)
Secondary	0.43(0.32-0.58)***	0.68(0.48-0.96)*
Higher	0.26(0.15-0.46)***	0.67(0.35-1.28)
Wealth index combined		
Poorest	Reference	Reference
Poor	0.64(0.47-0.87)**	0.71(0.52-0.96)*
Middle	0.59(0.44-0.79)***	0.73(0.53-1.00)
Rich	0.36(0.25-0.51)***	0.52(0.37-0.73)***
Richest	0.21(0.13-0.36)***	0.36(0.21-0.61)***
Residence		
Urban	Reference	Reference
Rural	2.11(1.54-2.89)***	1.09(0.73-1.63)
Region		
Aileu	Reference	Reference
Ainaro	2.30(1.08-4.91)*	2.25(1.03-4.92)*
Baucau	1.42(0.67-2.30)	1.77(0.85-3.71)
Bobonaro	1.56(0.62-3.92)	1.63(0.68-3.92)
Covalima	2.67(1.18-6.04)*	3.06(1.36-6.93)*
Dili	1.33(0.63-2.79)	2.51(1.13-5.59)*
Ermera	6.36(2.90-14.0)***	5.22(2.37-11.5)***
Lautem	1.42(0.61-3.31)	1.91(0.85-4.28)
Liqui	3.03(1.48-6.21)**	3.30(1.58-6.88)**
Manatuto	1.59(0.76-3.33)	1.98(0.95-4.11)
Manufahi	1.81(0.83-3.97)	2.11(0.96-4.62)
Oecussi	3.40(1.51-7.63)**	2.59(1.16-5.82)*
Viqueque	1.62(0.74-3.55)	1.87(0.85-4.11)
Husband/partner drinks alcohol		
No	Reference	Reference
Yes	2.90(2.25-3.72)***	2.41(1.85-3.11***)

15.1. To account for the complex survey design and ensure representativeness, all analyses applied sampling weights using the “svy” command. Descriptive statistics summarized participant characteristics, followed by bivariate analysis to explore associations between independent variables and severe IPV. Multivariable logistic regression was then employed to identify adjusted associations, reported as odds ratios (OR) and adjusted odds ratios (AOR) with 95% confidence intervals (CI). Variable selection for the multivariable model was guided by theoretical relevance and p-values <0.20 from the bivariate analysis. We assessed multicollinearity using the Variance Inflation Factor (VIF), and all variables included had VIFs <2.5. Missing data were minimal (<5%) and handled via listwise deletion.

Ethical consideration

This study utilized publicly available, anonymized secondary data from the 2016 Timor-Leste Demographic and Health Survey (DHS). As such, no additional ethical approval was required for this secondary data analysis. The original DHS survey protocol received ethical approval from the National Ethics Committee of the Timor-Leste Ministry of Health and the Institutional Review Board (IRB) of ICF International. All respondents provided informed consent at the time of data collection. Permission to use the dataset was granted by the DHS Program. The study adheres to the ethical principles outlined in the Declaration of Helsinki and follows the International Committee of Medical Journal Editors (ICMJE) guidelines.

Results

Table 1 provides an overview of the respondents' sociodemographic and partner-related characteristics in Timor-Leste. The majority of

women were aged 25 years and older, and most were currently in a union. Educational attainment varied, with a considerable proportion of women having no formal or only primary education, suggesting potential barriers to empowerment and access to information. The distribution of wealth was relatively even across quintiles, though a notable share of respondents belonged to the poorest and poorer categories, reflecting broader economic vulnerability. Most respondents resided in rural areas, consistent with the country's demographic profile, and representation across regions showed slight concentration in Dili and select municipalities. Partner alcohol consumption was reported by more than one-third of women, indicating a potential behavioral risk factor within households. Notably, 13.3% of respondents reported experiencing severe violence from their husband or partner, underscoring the ongoing relevance of intimate partner violence as a public health concern in Timor-Leste.

Figure 1 illustrates the prevalence of women in Timor-Leste who have experienced severe violence by their husband or partner. The data shows that 13.26% of women reported experiencing severe violence, while the majority, 86.74%, indicated they had not. This significant disparity highlights that although severe violence affects a smaller proportion of women, it remains a critical issue requiring attention.

Table 2 presents the bivariate associations between severe intimate partner violence (IPV) and key sociodemographic characteristics. Several variables were significantly associated with increased prevalence of severe IPV among women in Timor-Leste.

Age was a significant factor, with the highest prevalence observed among women aged 25–34 years. Marital status was also relevant, as women currently in a union were significantly more likely to report severe IPV compared to those who were

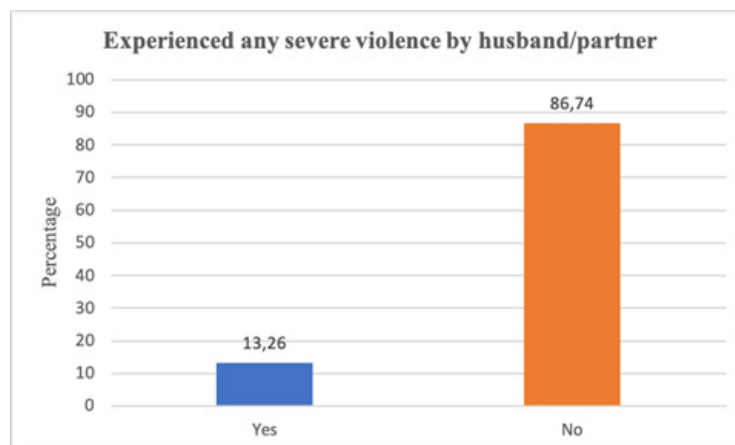


Figure 1. Prevalence of experienced any severe violence by husband/partner among women in Timor Leste

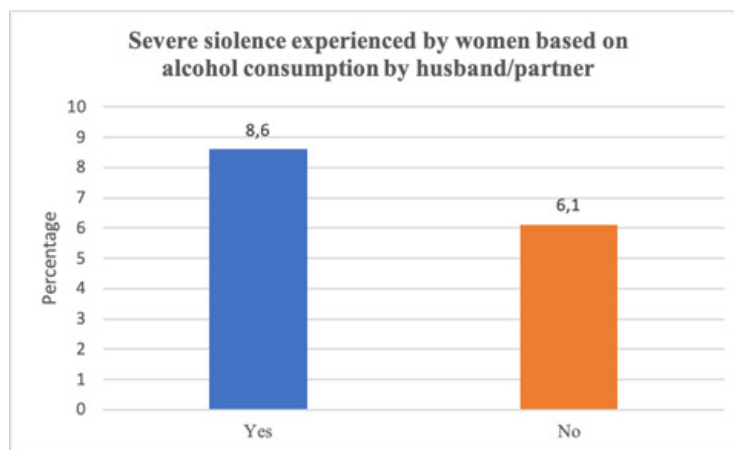


Figure 2. Women faced severe violence linked to their husbands' or partners' alcohol consumption in Timor Leste

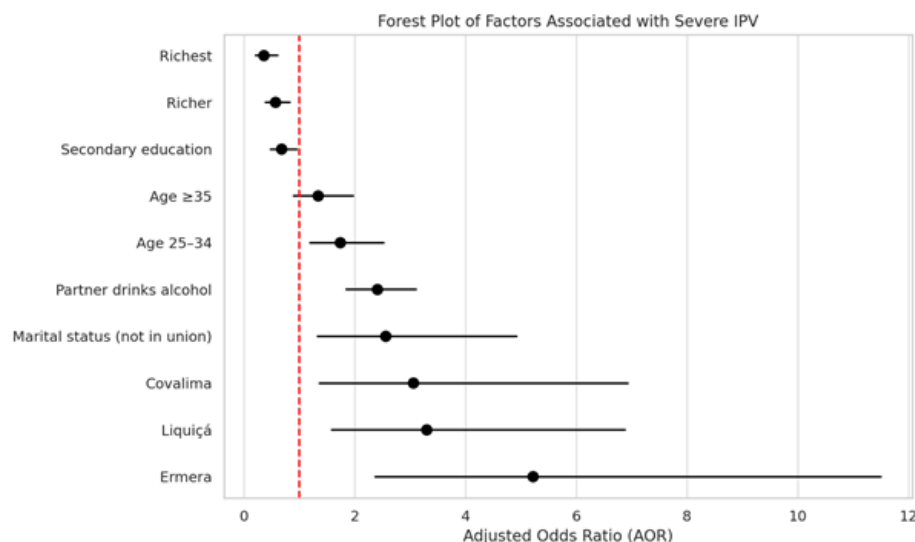


Figure 3 Forest plot of adjusted odds ratios (AOR) for factors associated with severe intimate partner violence among women in Timor-Leste

never married, divorced, or widowed. Educational attainment showed an inverse relationship with IPV; women with no or low education levels reported higher violence, while those with higher education experienced the least. Similarly, economic status, measured by wealth index, was inversely associated with IPV, with the highest rates among women from the poorest households. Rural residence was linked to increased reports of violence compared to urban settings. Significant regional variation was also observed, indicating potential geographic disparities in IPV prevalence. One of the strongest associations emerged with partner alcohol consumption: women whose husbands or partners consumed alcohol had markedly higher rates of severe IPV than those whose partners did not drink.

Figure 2 illustrates the relationship between

husbands' and partners' alcohol consumption and the incidence of severe violence against women in Timor Leste. The statistics indicate that 8.6% of women reported experiencing severe violence when their husbands or partners drank alcohol, in contrast to 6.1% of women whose husbands or partners abstained from alcohol. These results suggest a possible link between alcohol use and severe violence, highlighting the need for targeted measures to combat alcohol-related violence in intimate relationships.

Table 3 presents the multivariable logistic regression results identifying factors associated with severe intimate partner violence (IPV) among women in Timor-Leste. Both crude (Model 1) and adjusted (Model 2) odds ratios are reported.

Women aged 25–34 were significantly more

likely to experience severe IPV than those aged 15–24, even after adjustment (AOR = 1.74; 95% CI: 1.19–2.52), suggesting increased vulnerability in early adulthood. Although older women (≥ 35 years) showed elevated odds in the unadjusted model, this association lost significance after controlling for confounders.

Marital status remained a strong predictor, with women who were never married, divorced, or widowed having more than twice the odds of experiencing severe IPV (AOR = 2.56; 95% CI: 1.33–4.92), possibly reflecting lingering exposure to or consequences of prior abusive relationships.

Education and wealth emerged as protective factors. Women with secondary education had significantly lower odds of IPV compared to those with no formal education (AOR = 0.68; 95% CI: 0.48–0.96), and those in the richest wealth quintile had the lowest risk (AOR = 0.36; 95% CI: 0.21–0.61), reinforcing the importance of socio-economic empowerment.

Geographic disparities were also evident. Women residing in Ermera, Covalima, and Liquiçá districts faced markedly higher risks of severe IPV, highlighting the need for region-specific interventions.

Notably, partner alcohol consumption was the strongest behavioral risk factor identified. Women whose husbands or partners drank alcohol had more than twice the odds of experiencing severe IPV (AOR = 2.41; 95% CI: 1.85–3.11), emphasizing the urgency of addressing alcohol-related violence in prevention efforts.

Figure 3 presents a forest plot illustrating the adjusted odds ratios (AORs) and 95% confidence intervals for key variables associated with severe intimate partner violence (IPV) among women in Timor-Leste. The plot highlights significant sociodemographic and behavioral risk factors identified in the multivariable logistic regression model.

Notably, women aged 25–34 years had a significantly higher likelihood of experiencing severe IPV compared to the 15–24 age group. Being divorced, widowed, or never married also substantially increased the risk. In contrast, women with secondary education and those from wealthier households, particularly the richest quintile, had reduced odds of experiencing severe IPV, underscoring the protective effects of education and economic empowerment.

Geographic variation was evident, with women from districts such as Ermera, Covalima, and Liquiçá showing markedly elevated risks. Among all factors, partner alcohol consumption emerged as a particularly strong predictor, with women whose partners drank alcohol having more than twice the odds of experiencing severe IPV.

Discussion

The results of this study offer essential insights into

the elements linked to severe violence faced by women from their husbands or partners in Timor-Leste. Various sociodemographic and behavioral factors were identified as significant correlates of intimate partner violence (IPV), with a particular focus on age, marital status, education, wealth, regional differences, and alcohol consumption by the husband or partner.

The analysis reveals that women aged 25–34 years are at a significantly higher risk of experiencing severe violence than their younger peers aged 15–24 years. This observation aligns with the existing literature, which suggests that women in their childbearing years may be more susceptible to prolonged exposure to violent relationships and increased reliance on their partners during family raising periods (Cleaver, 2025; Kusunoki et al., 2023). Interestingly, although women aged 35 years and older also showed a higher likelihood of encountering violence, this connection became non-significant when other factors were controlled for, indicating that the heightened risk might be influenced by variables such as socioeconomic status or partner behavior (Allothman et al., 2024; Shahriar & Alam, 2024). This finding indicates a complex interaction between age and other risk factors for IPV.

The research also indicated that women who have never been married, widowed, or divorced are more prone to experiencing severe violence than those who are currently married. This finding is consistent with earlier studies suggesting that women not in formal relationships, especially those separated from their spouses, might encounter retaliatory violence (Hulley et al., 2023; Vikander et al., 2024). The increased vulnerability of widowed or divorced women is often intensified by societal stigma and reduced social support, making them more susceptible to violence from current or former partners (Wessells & Kostelny, 2022). This finding highlights the importance of implementing targeted interventions to assist women in unstable marital situations.

Education has been identified as a key protective factor for IPV. Women with secondary education were significantly less likely to experience severe violence than those without any education. This observation is supported by global evidence linking higher education levels to a decreased risk of IPV, as education empowers women and raises their awareness of their rights (Donkoh et al., 2024; Naseem et al., 2024; Shaikh, 2022). Although the protective effect of higher education was not statistically significant, this trend suggests that educational attainment plays a crucial role in reducing the risk of IPV. Improving women's access to education, particularly in rural areas, could be a critical strategy for decreasing violence (Patwary & Esha, 2025; Shaikh, 2022).

A clear inverse relationship was found between wealth and IPV, indicating that women with greater financial resources are much less likely to suffer from

severe violence than those with fewer resources. This connection underscores the influence of economic inequality on the susceptibility of women to violence. Women with more wealth typically have better access to resources such as legal and social protection, which can lessen their reliance on abusive partners (Carolina de Vargas Nunes et al., 2020; Sarac & Odabas, 2025). Conversely, financial difficulties can heighten stress and conflict within families, potentially increasing the risk of violence (Carolina de Vargas Nunes et al., 2020). Tackling economic disparities and fostering women's financial independence are crucial strategies to prevent IPV.

The study also revealed notable regional differences in IPV rates, with areas such as Ermera, Covalima, and Liquiçá exhibiting a significantly higher risk of severe violence. This observation aligns with other studies that have identified geographic areas with high IPV rates, often associated with cultural, economic, and infrastructural differences (Leite, 2023; White et al., 2024). The increased prevalence in these regions may be due to variations in social support systems, law enforcement, and cultural views of gender roles and violence. Therefore, interventions should be customized to address the unique needs of these high-risk areas, emphasizing community-based programs to change norms and enhance services for survivors (Angehrn et al., 2021; Leite, 2023).

A particularly noteworthy finding was the strong link between a husband's or partner's alcohol consumption and the likelihood of severe violence, with women whose partners drank alcohol having more than double the odds of experiencing severe violence compared to those whose partners did not drink alcohol. This finding is consistent with extensive research connecting alcohol use to IPV, as alcohol can impair judgment and escalate conflict into violence (Olena Shubina et al., 2023; Sontate et al., 2021; Wilson et al., 2024). Tackling alcohol abuse through public health initiatives and incorporating alcohol screening and IPV risk assessments into routine health services could be crucial in reducing IPV in Timor-Leste (Coll et al., 2021).

The results of this study have significant consequences for policies and interventions designed to decrease IPV during Timor-Leste. Initially, enhancing women's access to education and economic opportunities diminished their susceptibility to violence. Policies that encourage female empowerment, offer vocational training, and improve access to financial services are also advantageous. Moreover, specific interventions for women who are not in formal marital relationships, such as those who are divorced, widowed, or separated, are vital, as these groups are at an increased risk of violence. Furthermore, tackling harmful alcohol consumption through public health initiatives could address one of the most significant behavioral risk factors for IPV. Programs focused on reducing alcohol intake, especially among men, and providing treatment for alcohol dependency may

be effective in reducing domestic violence. Finally, interventions should be geographically focused, concentrating on high-risk areas where women are more prone to experiencing violence. Community-based strategies that involve local leaders, increase awareness of gender-based violence, and promote non-violent conflict resolution methods are crucial for addressing regional disparities.

In addition to policy and community interventions, nursing practices play an essential role in addressing IPV. Nurses, as frontline health providers, are positioned to identify women at a higher risk, such as those with partners who consume alcohol or those from disadvantaged households, through routine screening in reproductive and maternal health services. They can also provide trauma-informed care, deliver health education that empowers women, and advocate supportive environments to protect survivors. At the community level, nurses may serve as agents of change by raising awareness of the health impacts of IPV and harmful alcohol use while promoting protective factors such as education and women's empowerment. Strengthening nursing involvement in IPV prevention and management is therefore crucial to improving women's health outcomes in Timor-Leste.

Nursing implication

This study highlights the critical role of nurses in addressing intimate partner violence (IPV) during Timor-Leste. Nurses should incorporate routine IPV and alcohol use screening into reproductive and maternal health services to identify at-risk women and provide timely referrals. Strengthening nursing education with training in IPV management, trauma-informed care, and culturally sensitive communication is essential to improve nurses' readiness. At the community level, nurses can serve as advocates and educators, promoting awareness of the harmful effects of alcohol consumption and empowering women through health education. By integrating these strategies, nursing practice can contribute significantly to IPV prevention and the protection of women's health.

Limitation of the study

This study had several limitations. First, the cross-sectional design limited the ability to establish causal relationships between risk factors and severe IPV. Second, the use of self-reported data may be subject to recall and social desirability bias, potentially leading to underreporting of violence. Third, the data were derived from the 2016 DHS, which may not fully capture recent trends in IPV in Timor-Leste. Despite these limitations, the findings remain relevant, as they highlight structural risk factors, such as education, wealth, and alcohol use, which are relatively stable over time. Future studies should consider using longitudinal or mixed-method approaches and more recent datasets to better capture changing patterns and provide deeper insights into IPV dynamics.

Conclusion

This study highlights the significant impact of sociodemographic and behavioral factors on the likelihood of severe intimate partner violence (IPV) among women in Timor-Leste. The study's main findings revealed that factors such as a partner's alcohol use, socioeconomic status, and level of education play a crucial role in influencing IPV risk. Women in vulnerable circumstances, such as those in lower-wealth brackets or with partners who consume alcohol, are at an increased risk. Additionally, geographical differences suggest the necessity for region-specific strategies. To effectively combat IPV in Timor-Leste, a comprehensive approach is needed, which includes educational initiatives to empower women, economic programs to lessen dependency, and public health policies aimed at reducing alcohol abuse. It is also important to implement targeted interventions for high-risk areas and to support women in unstable marital situations. When these efforts are culturally sensitive and community focused, they can greatly reduce the prevalence of IPV, thereby enhancing the overall health and well-being of women in Timor-Leste.

Declaration of Interest

The author(s) declared no potential conflicts of interest concerning the research, authorship, and/or publication of this article.

Acknowledgment

The authors would like to thank all participants, Institute of Technology Science and Health, Dr Soepraen Kesdam V/Brawijaya Hospital, Malang, and the Demographic and Health Surveys (DHS) program for providing access to the data used in this study. We also extend our thanks to the women who participated in the survey, sharing their experiences and contributing to the understanding of intimate partner violence in Timor-Leste. Additionally, we acknowledge the support and input from colleagues and institutions that contributed to the successful completion of this manuscript.

Funding

No funding

Data Availability

The supporting data are available:
https://dhsprogram.com/data/dataset/Timor-Leste_Standard-DHS_2016.cfm?flag=0

References

- Aboagye, R. G. (2023). Ending violence against women: Help-seeking behaviour of women exposed to intimate partner violence in sub-saharan africa. *PLOS ONE*, 18(10), e0291913. <https://doi.org/10.1371/journal.pone.0291913>
- Aboagye, R. G., Tengan, C. L., Salifu, I., Acheampong, H. Y., & Seidu, A. A. (2022). Partner alcohol consumption and intimate partner violence against women in sexual unions in sub-saharan africa. *PLOS ONE*, 17(12), e0278196. <https://doi.org/10.1371/journal.pone.0278196>
- Alothman, H. M., AbdelRahman, A. R. A., Aderibigbe, S. A., & Ali, M. (2024). Risk factors associated with intimate partner violence (IPV) against Jordanian married women: A social ecological perspective. *Heliyon*, 10(10), e30364. <https://doi.org/https://doi.org/10.1016/j.heliyon.2024.e30364>
- Angehrn, A., Fletcher, A. J., & Carleton, R. N. (2021). "Suck It up, buttercup": Understanding and overcoming gender disparities in policing. *Int J Environ Res Public Health*, 18(14). <https://doi.org/10.3390/ijerph18147627>
- Carolina de Vargas Nunes, C., Ewerling, F., García-Moreno, C., Hellwig, F., & Barros, A. J. D. (2020). 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(1), e002208. <https://doi.org/10.1136/bmjgh-2019-002208>
- Cleaver, H. (2025). Domestic abuse and the impact on young children: A UK perspective. *Children and Youth Services Review*, 172, 108236. <https://doi.org/https://doi.org/10.1016/j.childyouth.2025.108236>
- Coll, C. V. N., Ewerling, F., García-Moreno, C., Hellwig, F., & Barros, A. J. D. (2020). 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 Glob Health*, 5(1), e002208. <https://doi.org/10.1136/bmjgh-2019-002208>
- Coll, C. V. N., Santos, T. M., Devries, K., Knaul, F., Bustreo, F., Gatuguta, A., Houvessou, G. M., & Barros, A. J. D. (2021). Identifying the women most vulnerable to intimate partner violence: A decision tree analysis from 48 low and middle-income countries. *eClinicalMedicine*, 42, 101214. <https://doi.org/https://doi.org/10.1016/j.eclinm.2021.101214>
- Donkoh, I. E., Aboagye, R. G., Okyere, J., Seidu, A.-A., Ahinkorah, B. O., & Yaya, S. (2024). Association between the survey-based women's empowerment index (SWPER) and intimate partner violence in sub-Saharan Africa. *Reproductive Health*, 21(1), 63. <https://doi.org/10.1186/s12978-024-01755-8>
- Forbes, S. M., Schwartz, N., Fu, S. H., Hobin, E., & Smith, B. T. (2024). The association between off- and on-premise alcohol outlet density and 100% alcohol-attributable emergency department visits by neighbourhood-level socioeconomic status in ontario, canada. *Health Place*, 89, 103284. <https://doi.org/10.1016/j.healthplace.2024.103284>
- Ghoshal, R. (2024). Factors associating with help-

- seeking by women facing intimate partner violence in india: Insights from national family health survey-5. 25. <https://doi.org/10.21203/rs.3.rs-3204058/v1>
- Gibbs, A., Mkhwanazi, S., Ramsoomar, L., Willan, S., & Jewkes, R. (2024). Couples, alcohol use and experience of intimate partner violence among young women in urban informal settlements in durban, south africa: A mixed methods study. *Social Science & Medicine*, 356, 117144. <https://doi.org/https://doi.org/10.1016/j.socscimed.2024.117144>
- González, L., & Rodríguez-Planas, N. (2020). Gender norms and intimate partner violence. *Journal of Economic Behavior & Organization*, 178, 223-248. <https://doi.org/https://doi.org/10.1016/j.jebo.2020.07.024>
- Gunarathne, L., Bhowmik, J., Apputhurai, P., & Nedeljkovic, M. (2023). Factors and consequences associated with intimate partner violence against women in low- and middle-income countries: A systematic review. *PLOS ONE*, 18(11), e0293295. <https://doi.org/10.1371/journal.pone.0293295>
- Hailu, H. T., Mekonnen, W., Gufue, Z. H., Weldegebriel, S. G., & Dessalegn, B. (2023). Intimate partner violence as a determinant factor for spontaneous abortion during pregnancy: An unmatched case-control study. *Frontiers in Public Health*, 11, 1114661. <https://doi.org/10.3389/fpubh.2023.1114661>
- Hulley, J., Wager, K., Gomersall, T., Bailey, L., Kirkman, G., Gibbs, G., & Jones, A. D. (2023). Continuous traumatic stress: Examining the experiences and support needs of women after separation from an abusive partner. *J Interpers Violence*, 38(9-10), 6275-6297. <https://doi.org/10.1177/08862605221132776>
- Ikuteyijo, O. O., Zepro, N., Akinyemi, A. I., Probst-Hensch, N., & Merten, S. (2024). Socio-economic factors influencing intimate partner violence among adolescents and young women in sub-saharan africa: A scoping review. *Public Health Rev*, 45, 1607041. <https://doi.org/10.3389/phrs.2024.1607041>
- Jean Simon, D., Kondo Tokpovi, V. C., Ouedraogo, A., Dianou, K., Kiragu, A., Olorunsaiye, C. Z., & Paul, B. (2025). Intimate partner violence during pregnancy against 601,534 women aged 15 to 49 years in 57 LMICs: Prevalence, disparities, trends and associated factors using demographic and health survey data. *eClinicalMedicine*, 86, 103382. <https://doi.org/https://doi.org/10.1016/j.eclinm.2025.103382>
- Kirkbride, J. B., Anglin, D. M., Colman, I., Dykxhoorn, J., Jones, P. B., Patalay, P., Pitman, A., Sonesson, E., Steare, T., Wright, T., & Griffiths, S. L. (2024). The social determinants of mental health and disorder: Evidence, prevention and recommendations. *World Psychiatry*, 23(1), 58-90. <https://doi.org/10.1002/wps.21160>
- Klencakova, L. E., Pentaraki, M., & McManus, C. (2023). The impact of intimate partner violence on young women's educational well-being: A systematic review of literature. *Trauma Violence Abuse*, 24(2), 1172-1187. <https://doi.org/10.1177/15248380211052244>
- Kusunoki, Y., Bevilacqua, K., & Barber, J. S. (2023). The dynamics of intimate relationships and violent victimization among young women. *J Interpers Violence*, 38(3-4), 3344-3372. <https://doi.org/10.1177/08862605221106131>
- Leite, F. M. C. (2023). Intimate partner violence against women during covid-19: A population-based study in vitória, state of espírito santo, brazil. *PLOS ONE*, 18(12), e0295340. <https://doi.org/10.1371/journal.pone.0295340>
- Manna, S., Singh, D., Barik, M., Rehman, T., Ghosal, S., Kanungo, S., & Pati, S. (2024). Prevalence of intimate partner violence among Indian women and their determinants: A cross-sectional study from national family health survey - 5. *BMC Womens Health*, 24(1), 363. <https://doi.org/10.1186/s12905-024-03204-x>
- Naseem, B., Anwar, A., Anwar, A., Ahmad, M., & Abbas, S. J. (2024). Empowering women through education: A study on reducing violence against women in lahore. *Bulletin of Business and Economics (BBE)*, 13. <https://doi.org/10.61506/01.00331>
- Ohurira, T., Iyer, H. S., Wagman, J. A., Hahn, J., & Bajunirwe, F. (2022). Proximity to alcohol sellers and dose response relationship between alcohol consumption with intimate partner violence in rural southwestern uganda. *Journal of Interpersonal Violence*, 38(1-2), 1040-1059. <https://doi.org/10.1177/08862605221086648>
- Patwary, M. H., & Esha, S. N. (2025). Interplay of education and community norms in justifying intimate partner violence among ever-married women aged 15-49 years in Bangladesh: A cross-sectional study. *BMC Public Health*, 25(1), 1354. <https://doi.org/10.1186/s12889-025-22348-5>
- Rollero, C., & Speranza, F. (2020). Intimate partner violence and resilience: The experience of women in mother-child assisted living centers. *Int J Environ Res Public Health*, 17(22). <https://doi.org/10.3390/ijerph17228318>
- Sáez, G., Ruiz, M. J., Delclós-López, G., Expósito, F., & Fernández-Artamendi, S. (2020). The effect of prescription drugs and alcohol consumption on intimate partner violence victim blaming. *International Journal of Environmental Research and Public Health*, 17(13), 4747. <https://doi.org/10.3390/ijerph17134747>
- Sarac, E., & Odabas, D. (2025). Gender-based economic violence and the exploitation of women: A deep dive. *World J Psychiatry*, 15(3), 103725. <https://doi.org/10.5498/wjp.v15.i3.103725>
- Shahriar, A. Z. M., & Alam, Q. (2024). Violence against women, innate preferences and financial inclusion. *Pacific-Basin Finance*

- Journal*, 87, 102482. <https://doi.org/https://doi.org/10.1016/j.pacfin.2024.102482>
- Shaikh, M. A. (2022). Prevalence and correlates of intimate partner violence against Women in liberia: findings from 2019–2020 demographic and health survey. *International Journal of Environmental Research and Public Health*, 19(6), 3519. <https://doi.org/10.3390/ijerph19063519>
- Shorey, R. C., Dunsiger, S. I., & Stuart, G. L. (2025). Alcohol use as a predictor of intimate partner violence in emerging adulthood: A dyadic daily diary investigation. *Addiction*, 120(1), 77-85. <https://doi.org/https://doi.org/10.1111/add.16681>
- Shubina, O., Mshana, G., Sichele, S., Malibwa, D., Mosha, N., Hashim, R., Nahay, F., Ayieko, P., Kapiga, S., & Stöckl, H. (2023). The association between alcohol consumption and intimate partner violence in young male perpetrators in mwanza, tanzania: A cross-sectional study. *Glob Health Action*, 16(1), 2185967. <https://doi.org/10.1080/16549716.2023.2185967>
- Shubina, O., Mshana, G., Sichele, S., Malibwa, D., Mosha, N., Hashim, R., Nahay, F., Ayieko, P., Kapiga, S., & Stöckl, H. (2023). The association between alcohol consumption and intimate partner violence in young male perpetrators in Mwanza, Tanzania: a cross-sectional study. *Global Health Action*, 16. <https://doi.org/10.1080/16549716.2023.2185967>
- Shwartz, N., O'Rourke, N., & Daoud, N. (2020). Pathways linking intimate partner violence and postpartum depression among jewish and arab women in Israel. *Journal of Interpersonal Violence*, 37(1-2), 301-321. <https://doi.org/10.1177/0886260520908022>
- Sontate, K. V., Rahim Kamaluddin, M., Naina Mohamed, I., Mohamed, R. M. P., Shaikh, M. F., Kamal, H., & Kumar, J. (2021). Alcohol, aggression, and violence: From public health to neuroscience. *Front Psychol*, 12, 699726. <https://doi.org/10.3389/fpsyg.2021.699726>
- Tolstrup, D., Roberts, S. T., Deya, R., Wanje, G., Shafi, J., James, J. R., Chander, G., McClelland, R. S., & Graham, S. M. (2025). Intimate partner sexual violence is associated with unhealthy alcohol use among Kenyan women engaged in sex work. *Drug and Alcohol Dependence Reports*, 14, 100315. <https://doi.org/https://doi.org/10.1016/j.dadr.2024.100315>
- Vikander, M., Larsson, A.-K. L., & Källström, Å. (2024). Managing post-separation violence: mothers' strategies and the challenges of receiving societal protection. *Nordic Social Work Research*, 14(3), 360-373. <https://doi.org/10.1080/2156857X.2023.2285988>
- Wessells, M. G., & Kostelny, K. (2022). The psychosocial impacts of intimate partner violence against women in LMIC contexts: toward a holistic approach. *Int J Environ Res Public Health*, 19(21). <https://doi.org/10.3390/ijerph192114488>
- White, S. J., Sin, J., Sweeney, A., Salisbury, T., Wahlich, C., Montesinos Guevara, C. M., Gillard, S., Brett, E., Allwright, L., Iqbal, N., Khan, A., Perot, C., Marks, J., & Mantovani, N. (2024). Global prevalence and mental health outcomes of intimate partner violence among women: A systematic review and meta-analysis. *Trauma Violence Abuse*, 25(1), 494-511. <https://doi.org/10.1177/15248380231155529>
- WHO. (2021). Devastatingly pervasive: 1 in 3 women globally experience violence. <https://www.who.int/news/item/09-03-2021-devastatingly-pervasive-1-in-3-women-globally-experience-violence>
- Wilson, I. M., Willoughby, B., Tanyos, A., Graham, K., Walker, M., Laslett, A. M., & Ramsoomar, L. (2024). A global review of the impact on women from men's alcohol drinking: The need for responding with a gendered lens. *Glob Health Action*, 17(1), 2341522. <https://doi.org/10.1080/16549716.2024.2341522>
- Yount, K. M., Cheong, Y. F., Khan, Z., Bergenfeld, I., Kaslow, N., & Clark, C. J. (2022). Global measurement of intimate partner violence to monitor Sustainable Development Goal 5. *BMC Public Health*, 22(1), 465. <https://doi.org/10.1186/s12889-022-12822-9>