## RESEARCH



# Prevalence and factors associated with intimate partner violence among women in Tanzania: evidence from Tanzanian demographic and health survey 2022



Pankras Luoga<sup>1\*</sup>, Siri A. Abihudi<sup>2</sup>, Jovinary Adam<sup>3</sup> and Magreth Thadei Mwakilasa<sup>2</sup>

## Abstract

**Background** Intimate partner violence (IPV) remains a pervasive issue in Tanzania, impacting the physical, mental, and emotional well-being of women across the country. Despite the existence of legal frameworks aimed at protecting women's rights, IPV persists in Tanzania. Understanding the magnitude and factors associated with IPV among women provides valuable insights that can be used to shape policies and interventions targeted at preventing and addressing IPV in the country. However, there is a paucity of evidence on the prevalence and factors associated with IPV nationwide. Therefore, this study is timely for addressing this gap in Tanzania.

**Methods** The study used a nationally representative secondary data that employed a cross-sectional design. Data for the current study were extracted from the 2022 Tanzania Demographic and Health Survey for women aged 15–49 years. A weighted sample of 4503 ever married or ever partnered women aged 15–49 years was used. The outcome variable was IPV status categorized into binary responses yes/no, while independent variables were socio-demographic and health related characteristics. Data were analysed using descriptive analysis, bivariable and multivariable logistic regression models. A threshold of *p*-value < 0.05 was used to determine statistically significant factor. The strength of the association was assessed using the adjusted odds ratio (aOR) along with its corresponding 95% confidence interval (CI).

**Results** The overall prevalence of IPV among women of reproductive age 15–49 years in Tanzania was 38.9%. The multivariable logistic regression results revealed that women who are working (aOR = 1.4,95%Cl:1.2,1.7) and those whose husband/partner drinks alcohol (aOR = 2.9,95%Cl: 2.4, 3.5) had higher odds of experiencing IPV compared to their counterparts. Conversely, protective factors include women's secondary and higher education level (aOR = 0.7,95%Cl:0.5,0.9) and residing in the Southern zones (aOR = 0.4,95%Cl:1.5,3.9).

**Conclusion** The prevalence of IPV among women in Tanzania remains high compared to the global average of 30%. This was mostly associated with women's employment status, and women married/cohabiting with alcohol consumers. The government should implement community-based educational programs to raise awareness about

\*Correspondence: Pankras Luoga luoga.pankras1@gmail.com

Full list of author information is available at the end of the article



© The Author(s) 2025. **Open Access** This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by-nc-nd/4.0/.

IPV and dedicate more efforts like raising the tax on all alcoholic beverages to controlling alcohol consumption among men as a strategy to combat IPV in society.

Keywords Intimate partner violence, Women, Tanzania

## Introduction

Intimate partner violence (IPV) is a crucial human right and public health concern which causes morbidity and mortality worldwide [1, 2]. IPV encompasses any physical, sexual, or psychological injury that is performed by a current or past partner [3]. The prevalence of IPV ranges from 15 to 71% among women aged 15–49 globally [4]. According to the World Health Organization (WHO), one-third of women worldwide have encountered physical or sexual or emotional abuse from their partner at a point in their lifetimes, highlighting the extent of this problem [5]. Studies report that the IPV negatively impacts health in terms of physical, mental, and emotional well-being of victim [6] and sometimes compromises health seeking behaviors like contraceptive use among women experiencing IPV [7-10]. The burden is disproportionally distributed across the globe, with more prevalent in developing countries [11], especially those located in sub-Saharan Africa [1, 12–14].

IPV is significantly higher in sub-Saharan Africa (SSA) as a result of cultural and religious convictions that perpetuate male dominance and the violation of women's rights [15–17]. The WHO has identified the limited data on IPV, specifically in low- and middle-income nations [18]. For example, studies done in Kenya reported factors associated with IPV include women who are employed, older ages 40 and above, residing in urban setting, and having husband/partner aged 50 or above, multiparous and partner consuming alcohol [16, 19]. Further, IPV is protected through the maintenance of secrecy and the establishment of a culture that discourages disclosure [16]. In many societies, there is a belief that IPV against women is a demonstration of love and a means of imparting discipline [16, 20, 21].

The prevalence of IPV in Tanzania is concerning, with an estimated 50% of ever-married women having experienced it [22]. Additionally, 44% of women aged 15–49 years have experienced physical or sexual violence by an intimate partner, and 30% of girls faced sexual violence before the age 18 years [17]. In the business city of Dar es Salaam, Tanzania, the prevalence of sexual and physical violence against women is reported to be 23% and 33% respectively [4]. Studies in Tanzania reported inconsistencies in the prevalence [8, 23–25] and factors associated with IPV among women of reproductive age in various regions of the country [26, 27]. For instances, studies report that the elevated prevalence of IPV is influenced by societal standards and worsened by the high incidence of early marriage [28] and childbearing, culture of silence, sometimes perpetuated by victims' lack of awareness of their rights [29], women who had difficulties with conception [30], partner alcohol abuse [29] as well as the limited levels of women's financial freedom and education [28]. Unfortunately, the majority of IPV incidents in Tanzania do not get reported to the proper authorities, which raises the risk of repeated episodes on the same individual [31]. Some measures that have been put in place to curb IPV in Tanzania include having a national strategy to fight against IPV, providing education on negative effects of IPV to the community, use of community leaders and establishment of gender desk in all police stations [23, 32]. However, IPV still remains a pervasive issue in Tanzania, significantly impacting the physical, mental, and emotional well-being of women across the country [24]. Studies show that IPV negatively influence uptake of some of health interventions including the use of contraception [8, 24].

Previous studies conducted on IPV in Tanzania, covered small study settings and lacked national representation [3, 23, 24, 33]. This study intends to determine the national estimates of prevalence of ever experience of IPV among ever-married or ever partnered women in Tanzania by using national representative data obtained from the 2022 Tanzania Demographic and Health Survey (TDHS). Our research also aims to enhance the current understanding of IPV in Tanzania by examining important demographic, social, and economic determinants. By doing so, we will provide valuable insights that can be used by the government and other stakeholders to shape policies and interventions targeted at preventing and addressing IPV in the country, in the SSA region and at global level.

## Methodology

## Study design

This study analysed secondary data of women of reproductive age 15–49 years collected using cross-sectional design during the 2022 Tanzania Demographic and Health Survey (TDHS). The TDHS is a nationally representative survey conducted at household level.

## Study setting

This study analyzed secondary data from the TDHS. Tanzania, with a population of 63 million, is largely rural (60%) and has a young median age of 18 years. Its economy is primarily based on agriculture (65% of the workforce) and an expanding urban informal sector. Despite economic growth, gender disparities persist, restricting women's access to education and economic opportunities, particularly in rural areas. The country also has one of the highest IPV rates in sub-Saharan Africa, with nearly 40% of women experiencing physical or sexual violence. Socio-cultural norms, economic dependency, and weak legal enforcement sustain IPV, making it a significant public health and human rights issue.

## Study population and sample size

The study involved a total of 4,503 women who ever married or partnered. The sample was obtained by considering all women who were selected for domestic violence module. However, all women who had missing in the dependent variable of the study, were dropped from the analysis.

## Sampling technique

In Tanzania, the survey employed two-stage stratified sampling procedures. The first stage involved stratum sectioning, which defined the number and the urban/rural distribution of strata, in this case strata were all the regions required for the survey. The second stage entailed the systematic selection of households from each of the selected cluster or Enumeration Area (EA), yielding 629 EAs. In each cluster, 20–28 households were selected for interview. Household interviews identified eligible men and women for individual interviews.

## Data collection process

The individual interviews were done with all women aged 15 to 49 years who were selected for domestic violence module, and it included both regular residents and visitors sleeping in the selected households the night before the survey. The survey used standardized questionnaire to collect data on various demographic and health issues including household characteristics, maternal care, and domestic violence issues including intimate partner violence. Participation in the survey was voluntary, and all participants provided informed consent prior to the start and during the interview. Given the sensitive nature of the topic, women carefully selected comfortable locations for conducting interviews to ensure the respondents' confidentiality and privacy throughout the survey. A detailed description of the survey methodology is documented elsewhere [34].

## Ethical approval

Apart from the ethical considerations outlined in the formal procedures for conducting the DHS, no additional permission for this study was necessary. However, for this work, the DHS custodian approved the use of the datasets after reviewing our submitted concept note. Worth noting that, all the datasets used in the analysis are freely available to the public upon request through the DHS program website (https://dhsprogram.com). This study used the TDHS 2022 as it is the most recent dataset available for Tanzania.

## Dependent variable

The dependent variable was generated from woman's responses on if she had ever experienced any form of IPV in her lifetime. The three forms of IPV were included the analysis: physical, sexual and emotional. Specifically, physical IPV included the following questions: Have you ever; been pushed, shake or had something thrown at you by your husband/partner?; Have you ever been slapped by your husband/partner?; Have you ever been punched by fist or hit by something harmful by your husband/partner?; Have you ever been kicked or drugged by your husband/partner?; Have you ever been strangled or burnt by your husband/partner?; Have you ever been threatened by knife/gun or other weapon by your husband/partner?; Have you ever had arm twisted or hair pulled by your husband/partner. Sexual IPV, the following questions were used; have you ever been physically forced to perform sexual acts respondent did not want to by your husband/partner? Have you ever been forced into unwanted sexual acts by your husband/partner and have you ever been physically forced into unwanted sex by your husband/partner?

Emotional IPV was developed from the response to the following questions: have you ever been humiliated by husband/partner? have you ever been threatened by harm with husband/partner? and ever been insulted or made to feel bad by husband/partner? The IPV was generated as a binary variable, coded 0 for no, if woman had [never] experienced any form of violence from a husband/partner, and coded 1 for yes, if woman had [ever] experienced any form of violence from a husband/partner. All cases with missing on the IPV variable were excluded from the analysis.

#### Independent variables

The independent variables in this analysis include age (categorized in three age- groups,15–24,25–35, and 36–49), educational level (primary and below and secondary and higher, type of place of residence(urban/rural), marital status (in union/not in union), We categorized the marital status using current status into two in union comprising married and cohabiting, and not in union including never married, separated, widow. Geographical zones (lake zone, northern zone, central zone, southern zone and coast zone), wealth quintile (poorest, poorer, middle, richer and richest), respondent's employment status (unemployed/employed), parity (0,1–4, and 5 or more). Access to health facility factors included distance to the health facility (not a big problem/a big problem) and getting permission to access healthcare (not a

big problem/a big problem). Other independent variables include husband's characteristics including age categorized in four groups (15-24,25-35, 36-49 and 50+), education level (primary and below, and secondary and higher) and alcohol consumption (no/yes). These variables have been used in other similar studies and they showed to significantly related to the outcome variable of ever experienced IPV in lifetime among women [12, 35-39].

## Data analysis

The analyses were conducted with Stata version 18 software and all statistical analysis were weighted by the application of svy command using weight for domestic violence module (d005/1,000,000) to account for the complex survey design and non-response rate. Descriptive analysis using univariate model was conducted to provide distribution in terms of percent and frequency of individual variables involved in the study. For understanding of IPV distribution, by the use of ArcGIS software and geospatial data obtained from the DHS custodian, the authors mapped the distribution of IPV across regions in Tanzania. In addition, inferential analysis was conducted using bivariate and multivariable logistic models to determine the association and magnitude of the association between independent and dependent variables. Before qualifying to be entered in the multivariable model, all the variables were tested for multicollinearity to ensure the variables do not correlate to each other. Worth noting that, age of the woman and age of her husband were correlated but due to their importance in the Tanzanian context, all the two variables were maintained. The threshold of p-value < 0.05 was used to determine the significant factors. The strength of the association was assessed using the adjusted odds ratio (aOR) along with its corresponding 95% confidence interval (CI).

## Results

## Socio-demographic characteristics of the women

Table 1 presents the demographics characteristics of the 4,503 study participants. Nearly half (42.8%) of the participants were aged 25–35 years, with a mean age of 32.3 years (SD = 8.6). The majority (79.8%) had attained primary education or below. Only 15.1% of the women were not in a union, while more than two thirds (68.4%) resided in rural areas. A small proportion (6.3%) were nulliparous (had not given birth previously). More than one thirds (37.9%) of participants were from the lake zone, and over half (63.8%) were employed. Almost one fifth (19.3%) belonged to the poorest households. Regarding their partners, 40.5% had husbands or partners aged 25–35 years. Slightly less than a quarter (23.4%) had a husband or partner with secondary education level or higher, and nearly a quarter (24.5%) reported that their husband or partner consumed alcohol.

Figure 1 illustrates the distribution of IPV among women across regions in Tanzania, developed by the authors using geospatial data obtained from the DHS custodian. The distribution of IPV which is indicated by concentration or sparse of red dot(s) across the country. Presence concentrated red dot(s) in an area indicating high IPV prevalence and sparsed red dot(s) in an area indicating low IPV prevalence. This distribution aligns with existing literature and is further supported by our analysis in Table 2. IPV is more prevalent in regions within the Lake Zone, particularly around Lake Victoria, including Mara, Geita, Simiyu, Kagera, Tabora, and Mwanza. High concentrations are also observed in the Northern Zone, covering Kilimanjaro, Arusha, and parts of Manyara, as well as in the Southern Zone, specifically in parts of Rukwa, Njombe, and Mbeya.

## Factors associated with experiencing IPV among women of reproductive age by socio-demographic characteristics

The prevalence of ever experienced IPV among women is 38.9% (95%CI;36.9%, 40.9%). Of all studied women, 36.8% of 15-24 age-group, 38.1% of 25-35 age-group and 41.3% of 36-49 age-group ever experienced any of the three forms of violence, however there was not statistically significant differences between age groups and the prevalence of IPV. About 41.1% (95%CI; 38.9,43.4) and 30.2% (95%CI; 26.3,34.3) of women whose highest educational attainment was primary and below, and secondary and higher respectively experienced any forms of IPV and this was statistically significant. Table 3 further shows that 34.5% (95%CI; 30.3,36.9) and 41.4%%(95%CI; 38.8,44.0) women from urban and rural settings respectively have ever experienced IPV and type of place of residence was significantly associated with ever experienced IPV. As indicated in Table 3.

Results in Table 2 shows the bivariate and multivariable logistic regression results of factors associated with IPV among Women aged 15-49 years in Tanzania. After controlling for other variables in the adjusted logistic regression, women who are currently not in a union had higher odds (aOR;2.4,95%CI: 1.9, 2.9) of experiencing IPV compared to their counterparts who are in union. Women who were employed had 1.4 times (aOR;1.4,95%CI:1.2,1.7) higher odds of experiencing IPV compared to those who are unemployed. Women whose husbands/partners consume alcohol had 2.9 times (aOR;2.9,95%CI:2.4,3.5) higher odds to experience any form of IPV compared to their counterparts with husband/partner who does not consume alcohol. Women with secondary education and higher (aOR;0.7,95%CI:0.5,0.9) and residing in Southern zones (aOR;0.4,95%CI:1.5,3.9) had lower odds of IPV compared

## Table 1 Socio-demographic characteristics of the respondents using TDHS 2022

Variable	Frequency (N)	Percent (%)
Woman's characteristics (n = 4,503)		
Age-groups		
15–24	1,016	22.6
25–35	1,928	42.8
36–49	1,559	34.6
Mean age	32.3 years	(SD+-8.6)
Education levels		
Primary and below	3,593	79.8
Secondary and higher	910	20.2
Marital status		
Not in union	682	15.1
In union	3,821	84.9
Type of place of residence		
Urban	1,423	31.6
Rural	3,080	68.4
Parity		
0	282	6.3
1-4	3,077	68.3
5+	1,144	25.4
Geographical zones		
Lake zones	1,705	37.9
northern zone	482	10.7
Central zone	485	10.8
Southern	974	21.6
coast zone	857	19
Employment status		
Unemployed	1,632	36.2
Employed	2,871	63.8
Wealth Quintile		
Poorest	870	19.3
Poorer	935	20.8
Middle	924	20.5
Richer	906	20.1
Richest	868	19.3
Characteristics of husband/partner		
Age-groups (N = 3821)		
15–24	221	5.8
25–35	1,545	40.4
36–49	1,465	38.3
50+	590	15.4
Education level (N = 3822)		
Primary and below	2,943	77
Secondary and beyond	879	23
Husband/partner drinks alcohol (N=4,503)		
No	3,400	75.5
Yes	1,103	24.5
Ever experienced any type of IPV (N=4,503)		
No	2,751	61.1
Yes	1,752	38.9

SD = standard deviation



Fig. 1 Showing the distribution of the IPV across zones or regions in Tanzania

to their counterparts. However, women' age 35–49 years, rural residence, parity between 1 and 4, household wealth quintile and husband/partner's secondary and higher education level were not significantly associated with IPV.

## Discussion

Using secondary data analysis of the most recent TDHS, we aimed to investigate the prevalence and factors associated with IPV among women of reproductive age in Tanzania. Our analysis found a prevalence of 39% in Tanzania, exceeding the global average of 30% reported by the WHO [5]. In comparison to other studies conducted in Tanzania, the IPV prevalence in our research is marginally lower than the 46% recorded in a study utilising the 2015 DHS [28]. A slightly higher IPV prevalence of 41.1% was reported by a study done in Kenya using the 2022 DHS [40]. The other study which included 11 Eastern Africa countries reported the collective IPV prevalence of 43.7%, among the countries in the region whereby Tanzania had 49.05% of IPV [41]. Additionally, another study utilizing DHS data from 26 countries in SSA, reported the prevalence of IPV ranging from 10.8% in Comoros to 59.9% in Sierra Leone [36, 37]. The variations in IPV prevalence across studies are likely due to socio-economic and cultural differences, as well as ongoing socio-cultural transformations and shifts in societal attitudes and behaviors over time, highlighting the need to consider contextual and temporal factors when interpreting these discrepancies [35, 42, 43]. The high prevalence in this research underscore the pressing necessity for focused, nation-specific interventions and policies to effectively tackle IPV and promote the well-being of women in Tanzania and similar context. Addressing this issue is essential due to the negative consequences of IPV on victims' health like mental health and physical health including injuries [6, 24], and health-seeking behaviours, which ultimately can adversely affect the uptake of various health interventions, including contraception use [8].

In a multivariable logistic regression analysis, results indicated a significant association between numerous factors and a higher likelihood of experiencing IPV. Women who are not currently in union, women who were working and women whose husband/partner consumes alcohol had a higher likelihood of experiencing IPV compared to their counterparts. Conversely,

**Table 2** Bivariate and multivariable logistic regression results of factors associated with IPV among women aged 15–49 years inTanzania using TDHS 2022

Variable	cOR(95% CI)	P-value	aOR(95% CI)	P-value
Woman's characteristics				
Age groups (Years)				
15–24	Ref		Ref	
25–35	1.06 (1.9.,1.23)	0.592	0.9 (0.6,1.2)	0.469
36–49	1.21(0.96,1.53)	0.113	0.8 (0.5, 1.3)	0.413
Educational level				
Primary and below	Ref		Ref	
Secondary and beyond	0.62 (0.51,0.76)	< 0.001	0.7 (0.5,0.9)	0.004
Marital Status				
In union	Ref		Ref	
Not in union	2.56 (2.06,3.19]	< 0.001	2.4 (1.9, 2.9)	< 0.001
Type of place of residence				
Urban	Ref		Ref	
Rural	1.4 (1.16,1.69)	< 0.001	1.2 (0.9, 1.5)	0.141
Parity				
0	Ref		Ref	
1-4	1.06 (0.76,1.49)	0.713	0.9 (0.6,1.3)	0.502
5+	1.41 (0.98,2.05)	0.061	1.0 (0.7, 1.6)	0.831
Geographical zones				
Lake zone	Ref		Ref	
Northern zone	0.72(0.53,0.98)	0.033	0.8 (0.3,1.1)	0.316
Central zone	0.88(0.67,1.15)	0.359	0.8 (0.8,2.5)	0.081
Southern zones	0.43(0.35,0.54)	< 0.001	0.4 (1.5,3.9)	0.001
Coast Zones	0.49(0.37,0.63)	< 0.001	0.5(0.8, 2.4)	0.001
Employment status				
Unemployed	Ref		Ref	
Employed	1.53 (1.3,1.81)	< 0.001	1.4 (1.2, 1.7)	0.001
Wealth quintile				
Poorest	Ref		Ref	
Poorer	1.07(0.84,1.35)	0.591	1.1 (0.9,1.5)	0.260
Middle	0.93(0.72,1.18)	0.545	1.2 (0.9,1.6)	0.200
Richer	0.94(0.74,1.19)	0.581	1.2 (0.9,1.6)	0.200
Richest	1.06(0.8, 1.4)	0.686	1.4 (1.0,2.0)	0.041
Characteristics of husband/partner				
Age group (years)				
15–24	Ref		Ref	
25–35	1.44 (0.99, 2.1)	0.057	1.5 (0.95,2.35)	0.079
36–49	1.47(0.95,2.27)	0.080	1.28(0.74,2.21)	0.374
50+	1.48 (0.91,2.41)	0.111	1.19 (0.64,2.2)	0.578
Education level				
Primary and below	Ref		Ref	
Secondary and beyond	0.67(0.55,0.83)	< 0.001	0.8 (0.64,1.1)	0.122
Husband/partner drinks alcohol	. , ,		. , ,	
No	Ref		Ref	
Yes	3.05(2.58.3.6)	< 0.001	2.9 (2.4, 3.5)	0.001

\* cOR=Crude Odds Ratio aOR=Adjusted Odds Ratio

attaining secondary education and higher, and residing in the southern zones were protective factors associated with experiencing IPV [44–46]. The findings underscore the necessity of targeting IPV therapies towards women possessing demographic and socio-economic factors that put them at risk of experiencing IPV. Customizing interventions for these high-risk populations is essential for effectively tackling and diminishing IPV in Tanzania.

The finding of the current study shows women who are not living in marital union either because they are Table 3 Chi-square test results of the factors associated IPV among women of reproductive age using TDHS 2022

$N_0$ YesWoman's characteristics%95% Cl%95% ClChi-square $P$ valueAge-groups5.97710.19015–2463.2[59,0,67.2]36.8[32,8,41.0]125–3561.9[58,6,65.0]38.1[35,0,41.4]136–4958.7[55,5,61.8]41.3[38,2,44.5]1Education levels $35.7480$ 0.001Primary and below58.9[56,6,61.1]41.1[38,9,43.4]Secondary and beyond69.8[65,7,73.7]30.2[26,3,34.3]Marital status $125,8660$ 0.001Not in union41.5[36,9,46.3]58.5[53,7,63.1]In union64.6[62,3,66.8]35.4[33,2,37.7]Urban66.5[63,1,69.7]33.5[30,3,36.9]Rural58.6[56,0,61.2]41.4[38,8,44.0]Parity $17,5883$ 0.006064.2[56,3,71.4]35.8[28,643.7]1–462.8[60,2,65.3]37.2[34,7,98.8]	Variable	Ever experienced physical OR sexual OR emotional violence by partner					
Woman's characteristics%95% Cl%95% ClChi-square $P$ -valueAge-groups $5.9771$ $0.190$ $15-24$ $63.2$ $[59.0,67.2]$ $36.8$ $[32.8,41.0]$ $100$ $25-35$ $61.9$ $[58.6,65.0]$ $38.1$ $[35.0,41.4]$ $36-49$ $58.7$ $[55.5,61.8]$ $41.3$ $[38.2,44.5]$ Education levels $58.7$ $[55.5,61.8]$ $41.3$ $[38.2,44.5]$ $35.7480$ $0.001$ Primary and below $58.9$ $[56.6,61.1]$ $41.1$ $[38.9,43.4]$ $35.7480$ $0.001$ Secondary and beyond $69.8$ $[65.7,73.7]$ $30.2$ $[26.3,34.3]$ $25.8860$ $0.001$ Not in union $41.5$ $[36.9,46.3]$ $58.5$ $[53.7,63.1]$ $1000$ $1000$ In union $64.6$ $[62.3,66.8]$ $35.4$ $[33.2,37.7]$ $24.8352$ $0.001$ Urban $66.5$ $[63.1,69.7]$ $33.5$ $[30.3,36.9]$ $17.5883$ $0.006$ Quart $58.6$ $[56.0,61.2]$ $41.4$ $[38.8,44.0]$ $17.5883$ $0.006$ Parity $1.588.6$ $[56.3,71.4]$ $35.8$ $[28.6,43.7]$ $1.5883$ $0.006$ Quart $64.2$ $[56.3,71.4]$ $35.8$ $[28.6,43.7]$ $1.44$ $1.588.3$ $1.588.5$ Quart $64.2$ $[56.3,71.4]$ $35.8$ $[28.6,43.7]$ $1.588.5$ $1.588.5$ $1.588.5$ Quart $64.2$ $[56.3,71.4]$ $35.8$ $[28.6,43.7]$ $1.588.5$ $1.588.5$ $1.588.5$ <		No	No				
Age-groups       5,9771       0,190         15-24       63.2       [59,067.2]       36.8       [32,8,41.0]       25-35         25-35       61.9       [58,665.0]       38.1       [35,0,41.4]       36-49         36-49       58.7       [55,5,61.8]       41.3       [38,2,44.5]       0.001         Education levels       35,7480       0.001         Primary and below       58.9       [56,6,61.1]       41.1       [38,9,43.4]         Secondary and beyond       69.8       [65,7,73.7]       30.2       [26,3,34.3]         Marital status       125,8860       0.001         Not in union       41.5       [36,9,46.3]       58.5       [53,7,63.1]         In union       64.6       [62,3,66.8]       35.4       [32,3,7.7]         Type of place of residence       24,8352       0.001         Urban       66.5       [63,1,69.7]       33.5       [30,3,36.9]         Rural       58.6       [56,0,61.2]       41.4       [38,84.0]         Parity       17,5883       0.006       00       0         0       64.2       [56,3,71.4]       35.8       [28,64,37]         1-4       62.8       [60,2,65.3]       37.2       <	Woman's characteristics	%	95% CI	%	95%Cl	Chi-square	P-value
15-24       63.2       [59,067.2]       36.8       [32,41.0]         25-35       61.9       [58,65.0]       38.1       [35,041.4]         36-49       58.7       [55,51.8]       41.3       [38,244.5] <b>Education levels</b> S8.9       [56,66.1.1]       41.1       [38,943.4]         Secondary and belowd       69.8       [65,73.7]       30.2       [26,334.3] <b>Marital status</b> Not in union       41.5       [36,946.3]       58.5       [53,763.1]         In union       41.5       [36,946.3]       58.4       [32,37.7]         Question fersidence         Urban       [65,71.7]       33.5       [30,336.9]         Toto folace of residence         Urban       66.5       [63,1,69.7]       33.5       [30,3,36.9]         Urban       66.5       [63,1,69.7]       33.5       [30,3,36.9]       Urban         Rural       58.6       [56,0,61.2]       41.4       [38,44.0]       Urban         Question       58.6       [56,0,61.2]       41.4       [38,44.0]       Urban       Urban       [56,20,2]       [30,2]	Age-groups					5.9771	0.190
25-35       61.9       [58,65.0]       38.1       [35.0,41.4]         36-49       58.7       [55,61.8]       41.3       [38.2,44.5]         Education levels         Primary and below       58.9       [56.6,11.]       41.1       [38.9,43.4]         Secondary and beyond       69.8       [65.7,73.7]       30.2       [26.3,43.3]         Marital status       125.8860       0.001         Not in union       41.5       [36.9,46.3]       58.5       [53.7,63.1]         In union       41.5       [36.9,46.3]       58.5       [53.7,63.1]         Verban       66.5       [63.1,69.7]       35.4       [30.3,36.9]         Rural       58.6       [56.6,1.2]       41.4       [38.8,44.0]         Prity       17.5883       0.001         0       66.5       [63.1,69.7]       33.5       [30.3,36.9]         Rural       58.6       [56.0,61.2]       41.4       [38.8,44.0]         Party       17.5883       0.006         0       64.2       [56.3,71.4]       35.8       [28.643.7]         1-4       62.8       [60.2,65.3]       37.2       [34.7,39.8]	15–24	63.2	[59.0,67.2]	36.8	[32.8,41.0]		
36-49       58.7       55.5,6.8]       41.3       (38.2,44.5]         Education levels       35.7480       0.001         Primary and below       58.9       (56.6,61.1)       41.1       (38.9,43.4)         Secondary and beyond       69.8       (55.7,37.7)       30.2       (26.3,34.3)         Marital status       69.8       (55.7,37.7)       30.2       (26.3,34.3)         Not in union       41.5       (36.9,46.3)       58.5       (53.7,63.1)         In union       41.5       (36.9,46.3)       58.5       (53.7,63.1)         Urban       64.6       (62.3,66.8)       35.4       (32.2,37.7)         Urban       66.5       (63.1,69.7)       33.5       (30.3,36.9)         Rural       58.6       (56.0,61.2)       41.4       (38.8,44.0)         Parity       17.5883       0.001         0       64.2       (56.3,71.4)       35.8       (28.6,43.7)         1-4       62.8       (60.2,65.3)       37.2       (34.7,39.8)	25–35	61.9	[58.6,65.0]	38.1	[35.0,41.4]		
Education levels       35,7480       0.001         Primary and below       58,9       [56,66,1.1]       41.1       [38,94,3.4]         Secondary and beyond       69.8       (57,73.7]       30.2       [26,33.4.3]         Marital status       125,8860       0.001         Not in union       41.5       [36,94,6.3]       58.5       [53,76,3.1]       0.001         In union       64.6       [62,36,6.8]       35.4       [32,37.7]       1       1         Urban       66.5       [63,169.7]       33.5       [30,336.9]       0.001         Urban       66.5       [63,169.7]       33.5       [30,336.9]       1         Parity       17,5883       0.006       0.001       0.001         0       64.2       [56,37,14]       35.8       [28,64,37]       0.001         1-4       62.8       [60,26,53]       37.2       [34,73,98]       0.001	36–49	58.7	[55.5,61.8]	41.3	[38.2,44.5]		
Primary and below       58.9       [56.6,1.1]       41.1       [38.9,43.4]         Secondary and beyond       69.8       [65.7,73.7]       30.2       [26.3,34.3]         Marital status       125.8860       0.001         Not in union       41.5       [36.9,46.3]       58.5       [53.7,63.1]         In union       64.6       [62.3,66.8]       35.4       [33.2,37.7]         Type of place of residence       24.8352       0.001         Urban       66.5       [63.1,69.7]       33.5       [30.3,36.9]         Rural       58.6       [56.0,61.2]       41.4       [38.8,44.0]         Parity       17.5883       0.006         0       64.2       [56.3,71.4]       35.8       [28.6,43.7]         1-4       62.8       [60.2,65.3]       37.2       [34.7,39.8]	Education levels					35.7480	0.001
Secondary and beyond       69.8       (65.7,73.7]       30.2       (26.3,34.3]         Marital status       125.8860       0.001         Not in union       41.5       (36.9,46.3)       58.5       (53.7,63.1)         In union       64.6       (62.3,66.8)       35.4       (33.2,37.7)         Type of place of residence       24.8352       0.001         Urban       66.5       (63.1,69.7)       33.5       (30.3,36.9)         Rural       58.6       (56.0,61.2)       41.4       (38.8,44.0)         Parity       17.5883       0.006         0       64.2       (56.3,71.4)       35.8       (28.6,43.7)         1-4       62.8       (60.2,65.3)       37.2       (34.7,39.8)	Primary and below	58.9	[56.6,61.1]	41.1	[38.9,43.4]		
Marital status       125.8860       0.001         Not in union       41.5       [36.9,46.3]       58.5       [53.7,63.1]         In union       64.6       [62.3,66.8]       35.4       [33.2,37.7]       24.8352       0.001         Type of place of residence       24.8352       0.001       10.001	Secondary and beyond	69.8	[65.7,73.7]	30.2	[26.3,34.3]		
Not in union       41.5       [36.9,46.3]       58.5       [53.7,63.1]         In union       64.6       [62.3,66.8]       35.4       [33.2,37.7]         Type of place of residence       24.8352       0.001         Urban       66.5       [63.1,69.7]       33.5       [30.3,36.9]         Rural       58.6       [56.0,61.2]       41.4       [38.8,44.0]         Parity       17.5883       0.006         0       64.2       [56.3,71.4]       35.8       [28.6,43.7]         1–4       62.8       [60.2,65.3]       37.2       [34.7,39.8]	Marital status					125.8860	0.001
In union       64.6       (62.3,66.8]       35.4       (33.2,37.7]         Type of place of residence       24.8352       0.001         Urban       66.5       (63.1,69.7]       33.5       (30.3,36.9]         Rural       58.6       (56.0,61.2]       41.4       (38.8,44.0]         Parity       17.5883       0.006         0       64.2       (56.3,71.4]       35.8       (28.6,43.7]         1-4       62.8       (60.2,65.3]       37.2       (34.7,39.8]	Not in union	41.5	[36.9,46.3]	58.5	[53.7,63.1]		
Type of place of residence         24.8352         0.001           Urban         66.5         [63.1,69.7]         33.5         [30.3,36.9]         1000           Rural         58.6         [56.0,61.2]         41.4         [38.8,44.0]         17.5883         0.006           Parity         17.5883         0.006         64.2         [56.3,71.4]         35.8         [28.6,43.7]         1000           1-4         62.8         [60.2,65.3]         37.2         [34.7,39.8]         1000         1000	In union	64.6	[62.3,66.8]	35.4	[33.2,37.7]		
Urban     66.5     [63.1,69.7]     33.5     [30.3,36.9]       Rural     58.6     [56.0,61.2]     41.4     [38.8,44.0]       Parity     17.5883     0.006       0     64.2     [56.3,71.4]     35.8     [28.6,43.7]       1–4     62.8     [60.2,65.3]     37.2     [34.7,39.8]	Type of place of residence					24.8352	0.001
Rural     58.6     [56.0,61.2]     41.4     [38.8,44.0]       Parity     17.5883     0.006       0     64.2     [56.3,71.4]     35.8     [28.6,43.7]       1-4     62.8     [60.2,65.3]     37.2     [34.7,39.8]	Urban	66.5	[63.1,69.7]	33.5	[30.3,36.9]		
Parity         17.5883         0.006           0         64.2         [56.3,71.4]         35.8         [28.6,43.7]           1-4         62.8         [60.2,65.3]         37.2         [34.7,39.8]	Rural	58.6	[56.0,61.2]	41.4	[38.8,44.0]		
0     64.2     [56.3,71.4]     35.8     [28.6,43.7]       1-4     62.8     [60.2,65.3]     37.2     [34.7,39.8]	Parity					17.5883	0.006
1–4 62.8 [60.2,65.3] 37.2 [34.7,39.8]	0	64.2	[56.3,71.4]	35.8	[28.6,43.7]		
	1–4	62.8	[60.2,65.3]	37.2	[34.7,39.8]		
5+ 55.8 [52.2,59.4] 44.2 [40.6,47.8]	5+	55.8	[52.2,59.4]	44.2	[40.6,47.8]		
<b>Geographic zones</b> 129.1452 0.001	Geographic zones				- / -	129,1452	0.001
Lake zones 52.4 [48.8.56.1] 47.6 [43.9.51.2]	Lake zones	52.4	[48.8.56.1]	47.6	[43.9.51.2]		
Northern zone 60.6 [54.1.66.8] 39.4 [33.2.45.9]	Northern zone	60.6	[54.1.66.8]	39.4	[33.2.45.9]		
Central zone 55.6 [50.0.61.0] 44.4 [39.0.50.0]	Central zone	55.6	[50.0.61.0]	44.4	[39.0.50.0]		
Southern 71.9 [68.6.74.9] 28.1 [25.1.31.4]	Southern	71.9	[68.6.74.9]	28.1	[25.1.31.4]		
Coast zone 69.4 [64.7.73.8] 30.6 [26.2.35.3]	Coast zone	69.4	[64.7.73.8]	30.6	[26.2.35.3]		
<b>Employment status</b> 42.3015 0.001	Employment status		[0 ). 0.00]		[	42,3015	0.001
Unemployed 67.4 [64.3.70.4] 32.6 [29.6.35.7]	Unemployed	67.4	[64.3.70.4]	32.6	[29.6.35.7]		
Employed 57.5 [54.9.60.0] 42.5 [40.0.45.1]	Employed	57.5	[54,9,60,0]	42.5	[40.0.45.1]		
Wealth quintile 36504 0.001	Wealth guintile		[,]		[]	3 6504	0.001
Poorest 61 [56 5 65 3] 39 [34 7 43 5]	Poorest	61	[56 5 65 3]	39	[34 7 43 5]	5.0501	0.001
Poorer 59.5 [55.6.63.2] 40.5 [36.8.44.4]	Poorer	595	[556632]	40.5	[36 8 44 4]		
Middle 62.8 [58.866.5] 37.2 [33.5.41.2]	Middle	62.8	[58 8 66 5]	37.2	[33 5 41 2]		
Richer 62.6 [58.8.66.2] 37.4 [33.8.41.2]	Bicher	62.6	[58 8 66 2]	37.4	[33.8.41.2]		
Richest 59.6 [54.6.64.5] 40.4 [35.5.45.4]	Bichest	59.6	[54 6 64 5]	40.4	[35 5 45 4]		
Characteristics of husband/partner	Characteristics of husband/partner	55.0	[0 1.0/0 1.0]		[00.07.01.1]		
Age-groups(years) 60654 0353	Age-groups(years)					60654	0 353
15-24 72.3 [63.4.79.7] 27.7 [20.3.36.6]	15-24	72 3	[63 4 79 7]	27.7	[20 3 36 6]	0.0001	0.555
25-35 644 [60.568.2] 35.6 [31.8.39.5]	25-35	64.4	[60 5 68 2]	35.6	[20.3,30.5]		
36-49 63.9 [60.7,67.0] 36.1 [33.0.39.3]	36-49	63.9	[60 7 67 0]	36.1	[33 0 39 3]		
50+ 63.7 [58.468.8] 36.3 [31.241.6]	50+	63.7	[58 4 68 8]	36.3	[31 2 41 6]		
<b>Education level</b> 21 7424 0.001	Education level	05.7	[50: 1,00:0]	50.5	[01:2,11:0]	21 7424	0.001
Primary and below 62.6 [60.1.65.0] 37.4 [35.0.39.9]	Primary and below	62.6	[60 1 65 0]	37.4	[35 0 39 9]	21.7 121	0.001
Secondary and beyond 71.3 [67.0.75.2] 28.7 [24.8.33.0]	Secondary and beyond	71 २	[67 0 75 2]	27. <del>-</del> 28.7	[24.8.33.0]		
Husband/partner drinks alcohol         248 1577         0.001	Husband/partner drinks alcohol	, 1.5	[0, .0,/ 0.2]	20./	[2 1.0,00.0]	248 1577	0.001
No 677 [654699] 323 [301346]	No	67.7	[65 4 69 9]	27.2	[30 1 34 6]	210.1377	0.001
Yes 40.7 [37.3.44.3] 50.3 [55.7.62.7]	Yes	40.7	[37 3 44 3]	593	[55,7,62,7]		

never married, divorced or widowed or separated had two times higher odds of experiencing IPV than those who are living in marital union. This could be due to the men and women who are in marriage have life- long plans which reduce quarrels and boost strong relationship among partners. This may be contrary to partners who are not married as they may not have long life plans [47]. This finding is consistent with a study which reported women in marriage are at less risk to IPV compared to their counter parts not in marriage [48]. This may call for tailored interventions to raise awareness on IPV among women who are not married to prepare them to fight against all forms of IPV. However, contrasting findings were reported in Haiti whereby women who were unmarried but living as partners had low likelihood of experiencing IPV [49]. Another study reported women who cohabit experience more IPV compared to married women [50]. Other contradictory findings are reported in India and Philippines whereby unmarried women lower likelihood of experiencing IPV compared to women who are married [51, 52]. Contextual and cultural differences may have resulted in the reported discrepancy in the direction of association of the variables in the current study and the study done in Haiti.

Concurring with previous studies carried in SSA and eastern Africa [37, 43, 53], our findings showed women who were employed were more likely to have experienced IPV. Similar findings were observed in a study carried across 16 countries in the SSA with the odds of IPV increasing by 1.4 times for each additional year of employment [43], and those reported in Eastern African countries [49], particularly in Kenya where women's employment was associated with experiencing IPV [16]. This suggest that employment may be a risk factors in the region. While the reason for association between employment and IPV are not entirely clear, but it may be related to increase in financial independence and autonomy that employment brings to women which also increases the autonomy in decision making around the household [54]. The latter challenges the traditional patriarchal gender roles that women need to be financially dependent on their husband, which can lead to increase conflicts with partner [37, 54]. Similarly, based on recommendations given by prior studies, we encourage implementing community level educational workshops tailored to partner to enhance dialogue and education about IPV. This may involve providing supportive networks and resources for women, and gradually modifying cultural attitudes and norms that influence IPV [37, 53].

Previous studies conducted in Tanzania, Kenya, Uganda, Ethiopia and Ghana have highlighted that men who consume alcohol are more likely to perpetrate IPV [23, 24, 28, 39, 42, 55], particularly physical abuse against their wives [28, 37, 38, 42, 56]. These findings align with our current research, which also indicates that women whose husband/partner consumed alcohol were twice likely to have experienced IPV compared with women whose husband/partner did not consume alcohol (need to be expanded). These findings have important implications for policy in Tanzania. The government and other stakeholders need to consider implementing policies and programs that address alcohol consumption as a key risk factor for IPV [23]. This could include increasing awareness about the dangers of alcohol consumption and its link to IPV, as well as providing support services for men who are struggling with alcohol addiction.

Research across SSA and beyond consistently shows that women with higher levels of education are less likely to experience IPV [24, 36, 37, 42, 43]. The latter is consistent with findings of the current study which showed that women who attained secondary education or higher have a lower risk of IPV compared to those with less education [40]. Similarly, a broader study across 19 SSA countries found a link between higher scores on a women's empowerment index (which includes education) and lower the likelihood of experiencing IPV [36, 37]. This may be due to educated individuals and the community starting questing the traditional norms including acts of IPV against women [20]. The protective effect of education likely stems from several factors. Education can raise awareness of IPV and available resources for help, equip individuals with conflict resolution skills, and empower them to avoid situations that might turn violent [20]. Furthermore, higher education is often associated with greater financial independence and enhanced decisionmaking power, which can help mitigate power imbalances in relationships and reduce the risk of IPV against women [44–46]. The findings underscore the importance of investing in girls' education, particularly at the secondary and higher levels, as a powerful strategy to reduce violence against women [44, 57]. However, one study done in Nepal reports a contrasting findings that women with higher education had higher likelihood of experiencing IPV [58]. This may be due to differences in contexts of the two study areas.

The current study found that residing in the Southern Zone of Tanzania, which comprises ten regions bordering the Indian Ocean and includes key food-producing areas (Lindi, Mtwara, Ruvuma, Katavi, Rukwa, Mbeya, Njombe, Iringa, and Ruvuma), was a protective factor against IPV among women compared to those living in the Lake Zone. Most of these regions are major foodproducing areas and predominantly rural, suggesting a potential link between household food security and reduced IPV against women. When families have stable access to food, financial stress and conflicts over food provision common triggers for IPV may be minimized, potentially lowering the risk of violence against women [33, 59]. This finding is consistent with other studies carried in countries located in the eastern Africa, which have suggested that in societies located in the lake zone, there is a belief that IPV against women is a demonstration of love and a means of imparting discipline [3, 16, 20, 21]. Also being mostly located in rural setting could also explain the situation of having less possibility of IPV [16]. While our study did not explore this belief in depth, there is a great need to promote and introduce programs that will help address the misconception of associating IPV with love in these communities.

Our study findings align with both the Social Ecological Model and Feminist Theory, providing a strong theoretical foundation for understanding IPV among women in Tanzania. The Social Ecological Model posits that IPV is influenced by multiple levels, including individual, relationship, community, and societal factors [60, 61]. Our study supports this by showing how socioeconomic conditions, food security, employment, alcohol consumption, and regional disparities contribute to IPV prevalence. Women in food-secure regions experienced lower IPV rates, reinforcing the model's emphasis on environmental factors shaping IPV risk. Similarly, Feminist Theory argues that IPV stems from systemic gender inequalities and power imbalances, which is evident in our findings [62]. The association between employment and IPV risk suggests that as women gain financial independence, they may challenge traditional gender roles, leading to conflicts within relationships. Moreover, the protective effect of higher education aligns with the feminist perspective that empowering women through knowledge and economic opportunities reduces IPV susceptibility.

## Strengths and limitations and of the study

This study utilized data from the 2022 TDHS, which employed a robust methodology and an internationally validated questionnaire with standardized questions to capture health and demographic indicators at a specific point in time. However, due to the cross-sectional design of the TDHS, we were unable to establish causal relationships between variables. Additionally, the use of secondary data presents inherent limitations, as certain critical factors such as cultural norms, which are known to influence IPV were not captured in the primary DHS survey. Furthermore, the TDHS did not collect data on ethnicity and religion, both of which have been reported as significant determinants of IPV in other parts of SSA [16]. As a result, our analysis could not account for these key socio-cultural factors, which may have influenced the patterns of IPV among women in Tanzania. Despite these limitations, the large, nationally representative sample, the standardized data collection and analysis methods enhance the reliability and generalizability of our findings.

## Conclusion

This study's findings highlight the prevalence and factors associated with IPV among Tanzanian women of reproductive age. The findings show that, belonging to the working class, and having a partner who consumes alcohol were associated with higher likelihood of experiencing IPV. Conversely, factors such as attaining a secondary educational level at least and residing in the southern zones were associated with lower odds of experiencing IPV. Policymakers should implement measures to address alcohol consumption among men including raising the tax on all alcoholic beverages to reduce the number of people who may afford buying alcohol, as it is a modifiable factor that could significantly reduce the prevalence of IPV. Also, prioritize education for women as a crucial protective factor against IPV and implement policies that promote the factor. Additionally, future research should focus on exploring the underlying causes of IPV in Tanzania and developing effective interventions to address them.

#### Abbreviations

 aOR
 Adjusted odds ratio

 CI
 Confidence interval

 cOR
 Crude odds ratio

 IPV
 Intimate partner violence

 SSA
 Sub-Saharan Africa

 TDHS
 Tanzania demographic and health survey

 WHO
 World health organization

#### Acknowledgements

The authors are grateful to the DHS data custodian for granting access and allowing the analysis that resulted in the completion of the present study.

#### Author contributions

PL - conceptualizing the idea for the study, data curation, data analysis, interpretation of the findings, writing a first draft of the manuscript, reviewing and editing the final manuscript JA - data curation, data analysis, interpretation of the findings and writing the first draft of the manuscript and reviewing a final version of the manuscript, SA- conceptualization of the study, writing and reviewing all versions of the manuscript. All authors reviewed and approved the final manuscript.

## Funding

No funding was secured for conducting the study.

#### Data availability

The data used in the analysis are available online and can be requested from the DHS custodian (https://dhsprogram.com/).

#### Declarations

#### Ethical approval and consent to participate

The study analysed the collected data from Demographic Health Survey (DHS) which had already obtained ethical clearance from Tanzanian National Bureau of Statistics (NBS) for data collection. In addition, before participating in the survey all respondents provided a written informed consent to participate in the survey as per the Helsinki declaration. Therefore, this study did not need another ethical clearance. However, permission to use the data was requested from the DHS custodian.

#### **Consent for publication**

Not applicable.

#### Competing interests

The authors declare no competing interests.

## Author details

<sup>1</sup>Department of Development Studies, Muhimbili University of Health and Allied Sciences, Box 65001, Dar es Salaam, Tanzania <sup>2</sup>Institute of Traditional Medicine, Muhimbili University of Health and Allied Sciences, P. O. Box 65001, Dar es Salaam, Tanzania <sup>3</sup>An independent researcher working in Dar es Salaam, Dar Es Salaam, Tanzania

Received: 13 August 2024 / Accepted: 28 April 2025 Published online: 19 May 2025

#### References

- WHO. Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and Non partner sexual violence. Geneva; 2013.
- CDC. Fast facts: preventing intimate partner violence. Natl Cent Inj Prev Control Div Violence Prev. 2022;1:6.
- Kazaura MR, Ezekiel MJ, Chitama D. Magnitude and factors associated with intimate partner violence in Mainland Tanzania. BMC Public Health. 2016;16(1):1–7.
- Ellsberg M, Jansen HA, Heise L, Watts CH, Garcia-Moreno C. Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence: an observational study. Lancet. 2008;9619(371):1165–72.
- WHO WHO. 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 nonpartner sexual violence against women. Switzerland: Geneva; 2021.
- Rodrigues M. The impact of intimate partner violence on the mental and physical health of sexual and gender minorities: A comprehensive review of quantitative. Arch Sex Behav. 2023;0123456789:1–17.
- Gunarathne L, Nedeljkovic M, Apputhurai P, Bhowmik J. Impact of intimate partner violence on mental health among married women in Sri Lanka: a study based on women's wellbeing Survey-2019. J Public Health U K. 2024;46(3):e410–8.
- Baritwa MS, Joho AA. Intimate partner violence influences modern family planning use among married women in Tanzania: cross-sectional study. BMC Public Health. 2024;24(1):1–12.
- Islam MJ, Broidy L, Baird K, Mazerolle P. Exploring the associations between intimate partner violence victimization during pregnancy and delayed entry into prenatal care: evidence from a population-based study in Bangladesh. Midwifery. 2017;47:43–52.
- Maxwell L, Devries K, Zionts D, Alhusen JL, Campbell J. Estimating the effect of intimate partner violence on women's use of contraception: A systematic review and meta-analysis. PLoS ONE. 2015;10(2):1–25.
- Ismayilova L, El-Bassel N. Prevalence and correlates of intimate partner violence by type and severity: Population-Based studies in Azerbaijan, Moldova, and Ukraine. J Interpers Violence. 2013;28(12):2521–56.
- Coll CVN, Ewerling F, García-Moreno C, Hellwig F, Barros AJD. 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. 2020;5(1):1–10.
- Dickson KS, Boateng ENK, Adzrago D, Addo IY, Acquah E, Nyarko SH. Silent suffering: unveiling factors associated with women 's inability to seek help for intimate partner violence in sub– Saharan Africa (SSA). Reprod Health. 2023;1–12.
- 14. WHO. Status Report on Violence Prevention 2014. 2014.
- Uthman OA, Lawoko S, Moradi T. Factors associated with attitudes towards intimate partner violence against women: A comparative analysis of 17 sub-Saharan countries. BMC Int Health Hum Rights. 2009;9(1).
- Memiah P, Ah Mu T, Prevot K, Cook CK, Mwangi MM, Mwangi EW, et al. The prevalence of intimate partner violence, associated risk factors, and other moderating effects: findings from the Kenya National health demographic survey. J Interpers Violence. 2021;36(11–12):5297–317.
- Oppong M, Yaa Pokua Afriyie H, Inaam U, Todd G, Nifasha J. Tanzania Gender-Based violence assessment: scope, programming, gaps and entry points. Washington DC, USA: The World Bank; 2017. pp. 1–62.
- WHO WHO. Preventing intimate partner and sexual violence against women: taking action and generating evidence. Geneva, Switzerland: WHO; 2010. pp. 1–93.
- Makayoto LA, Omolo J, Kamweya AM, Harder VS, Mutai J. Prevalence and associated factors of intimate partner violence among pregnant women attending Kisumu district hospital, Kenya. Matern Child Health J. 2013;17(3):441–7.
- Laisser RM, Nyström L, Lugina HI, Emmelin M. Community perceptions of intimate partner violence- a qualitative study from urban Tanzania. BMC Womens Health. 2011;13(11):1–12.
- 21. Gordon C. Intimate partner violence is Everyone's problem, but how should we approach it in a clinical setting? S Afr Med J. 2016;106(10):962–5.
- 22. NBS. Demographic and health survey and malaria Indicator survey 2015-16. Dar es Salaam; 2015.

- 23. Simmons E, Halim N, Servidone M, Steven E, Reich N, Badi L, et al. Prevention and mitigation of Intimate-Partner violence: the role of community leaders in Tanzania. Violence Women. 2020;26(3–4):359–78.
- 24. Kapiga S, Harvey S, Muhammad AK, Stöckl H, Mshana G, Hashim R, et al. Prevalence of intimate partner violence and abuse and associated factors among women enrolled into a cluster randomised trial in Northwestern Tanzania. BMC Public Health. 2017;17(1):1–11.
- Laisser RM, Nyström L, Lindmark G, Lugina HI, Emmelin M. Screening of women for intimate partner violence: a pilot intervention at an outpatient department in Tanzania. Glob Health Action. 2011;4(May 2014):7288.
- Abramsky T, Harvey S, Mosha N, Mtolela G, Gibbs A, Mshana G, et al. Longitudinal inconsistencies in women's self-reports of lifetime experience of physical and sexual IPV: evidence from the MAISHA trial and follow-on study in North-western Tanzania. BMC Womens Health. 2022;22(1):1–13.
- Halim N, Steven E, Reich N, Badi L, Messersmith L. Variability and validity of intimate partner violence reporting by couples in Tanzania. PLoS ONE. 2018;13(3):1–18.
- Kinyondo A, Ntegwa MJ, Miho A. Determinants of intimate partner violence in Tanzania: evidence from the National demographic and health survey. Afr J Econ Rev. 2021;IX(Iv):200–22.
- Mosha IH, Akyoo W, Ezekiel M. Factors for intimate partner violence in Tanzania: a qualitative experience of women living in informal settlements in Iringa Tanzania. Int J Sci Res. 2018;8(11):534–44.
- McCloskey LA, Williams C, Larsen U. Gender inequality and intimate partner violence among women in Moshi, Tanzania. Int Fam Plan Perspect. 2005;31(3):124–30.
- Magesa RJ. Prevalence of intimate partner violence among women in Arumeru district. Int J Multidiscip Res Anal. 2023;06(01):362–70.
- NPA-VAWC. Action plan to end violence against women and children in Tanzania. Guideline. 2016;2–5.
- Meyer SR, Mosha NR, Hatcher AM, Hashim R, Ayieko P, Kapiga S, et al. Food insecurity and intimate partner violence in Mwanza, Tanzania: A longitudinal analysis. Am J Prev Med. 2023;65(5):932–9.
- Ministry of Health (MoH) [Tanzania Mainland], Ministry of Health (MoH) [Zanzibar], National Bureau of Statistics (NBS), Office of the Chief Government Statistician (OCGS), and ICF. 2022. Tanzania Demographic and Health Survey and Malaria Indicator Survey. 2022.
- Vranda MN, Kumar CN, Muralidhar D, Janardhana N, Sivakumar P. Barriers to disclosure of intimate partner violence among female patients availing services at tertiary care psychiatric hospitals: A qualitative study. J Neurosci Rural Pract. 2018;9(3):326–30.
- Donkoh IE, Aboagye RG, Okyere J, Seidu AA, Ahinkorah BO, Yaya S. Association between the survey-based women's empowerment index (SWPER) and intimate partner violence in sub-Saharan Africa. Reprod Health. 2024;21(1):1–11.
- 37. Mossie TB, Mekonnen Fenta H, Tadesse M, Tadele A. Mapping the disparities in intimate partner violence prevalence and determinants across Sub-Saharan Africa. Front Public Health. 2023;11(June):1–13.
- Reese BM, Street WF, Hill C, Chen MS. Perpetration Victim Tanzan. 2022;36(919).
- Melkam M, Fente BM, Negussie YM, Asmare ZA, Asebe HA, Seifu BL et al. Impact of partner alcohol use on intimate partner violence among reproductive-age women in East Africa demographic and health survey: propensity score matching. BMC Public Health. 2024;24(1).
- Melkam M, Fentahun S, Rtbey G, Andualem F, Nakie G, Tinsae T, et al. Multilevel analysis of intimate partner violence and associated factors among reproductive-age women: Kenya demographic and health survey 2022 data. BMC Public Health. 2024;24(1):1–9.
- Tadesse Z, Id T, Gebrie WM, Tesema A, Alemneh TS, Teshale AB et al. Intimate partner violence and its associated factors among reproductive-age women in East Africa: -A generalized mixed effect robust Poisson regression model. 2023;1–13.
- Alemie AS, Yeshita HY, Zeleke EG, Mekonnen BD. Intimate partner violence and associated factors among HIV positive women attending antiretroviral therapy clinics in Gondar City, Northwest Ethiopia. BMC Womens Health. 2023;23(1):1–10.
- Ahinkorah BO. Polygyny and intimate partner violence in sub-Saharan Africa: evidence from 16 cross-sectional demographic and health surveys. SSM -Popul Health. 2021;13:100729. (December 2020).
- Sony SF. Factors affecting the reduction of domestic violence against married women by their intimate partners in rural Bangladesh. OALib. 2023;10(08):1–19.

- 45. Shamu S. Factors associated with past year physical and sexual intimate partner violence against women in Zimbabwe: results from a National cluster-based cross-sectional survey. Glob Health Action 2019;11(3).
- 46. Tsegaw M, Mulat B, Shitu K. Intimate partner violence and associated factors among reproductive age women in Liberia: a cross– sectional study using a recent Liberian demographic and health survey. BMC Womens Health. 2022;1–9.
- Brown SL, Manning WD, Payne KK. Relationship Quality Among Cohabiting Versus Married Couples. J Fam Issues. 2017 Aug [cited 2025 Mar 2];38(12):1730–53. Available from: https://journals.sagepub.com/doi/https://d oi.org/10.1177/0192513X15622236
- Yakubovich AR, Stöckl H, Murray J, Melendez-Torres GJ, Steinert JI, Glavin CEY, et al. Risk and protective factors for intimate partner violence against women: systematic review and meta-analyses of prospective–longitudinal studies. Am J Public Health. 2018;108(7):e1–11.
- Occean JR, Thomas N, Lim AC, Lovett SM, Michael-asalu A. Prevalence and Factors Associated With Intimate Partner Violence Among Women in Haiti: Understanding Household, Individual, Partner, and Relationship Characteristics. 2020.
- Wong JY ha, Choi AW man, Fong DY, tak, Pui E, Choi H, Wong JK, shing et al. A comparison of intimate partner violence and associated physical injuries between cohabitating and married women: a 5-year medical chart review. BMC Public Health. 2016;1–9.
- Mehra D, Srivastava S, Chandra M, Srivastava N, Laaksonen M, Saarinen HE et al. Effect of physical mobility, decision making and economic empowerment on gender– based violence among married youth in India– SAWERA project. BMC Public Health. 2023;1–14.
- Parcon CRF, Makani ALS. DHS WORKING PAPERS Intimate Partner Violence Experiences of Filipino Women: Evidence from the Philippines. 2024;(September).
- Alawode OA, Bolarinwa OA, Hajjar JM, Chukwudeh SO. Is intimate partner violence vertically transmitted among women in sub-Saharan Africa? Evidence from demographic health surveys between 2010 and 2019. 2023;3:1–11.
- Okyere J, Ayebeng C, Boateng ENK, Assie RAA, Odoi A, Dzirassah KD, et al. Spatial distribution and determinants of physical intimate partner violence among women in Kenya: evidence from the 2022 Kenya demographic and health survey. PLoS ONE. 2024;19(8 August):1–18.

- 55. Shubina O, Mshana G, Sichalwe S, Malibwa D, Mosha N, Hashim R, et al. The association between alcohol consumption and intimate partner violence in young male perpetrators in Mwanza, Tanzania: a cross-sectional study. Glob Health Action. 2023;16(1):1–9.
- 56. Alangea DO, Addo-Lartey AA, Sikweyiya Y, Chirwa ED, Coker-Appiah D, Jewkes R, et al. Prevalence and risk factors of intimate partner violence among women in four districts of the central region of Ghana: baseline findings from a cluster randomised controlled trial. PLoS ONE. 2018;13(7):1–19.
- Weitzman A. Does increasing women's education reduce their risk of intimate partner violence?? Evidence from an education policy reform. Criminology. 2018;56(3):574–607.
- Sapkota PM, Pandey AR, Adhikari B, Shrestha G, Piya R, Lamichhane B, et al. Intimate partner violence in Nepal: analysis of Nepal demographic and health survey 2022. PLoS ONE. 2024;19(8 August):1–21.
- Cid A, Leguisamo M. Marriage as a protective factor against intimate partner violence suffered by women. Exploring Mech Hisp Health Care Int. 2023;21(1):38–49.
- 60. Lyons N, Bhagwandeen B, Lyons N, Bhagwandeen B. Applying the Social-Ecological Framework to Link the Drivers of Intimate Partner Violence Among Women in the Caribbean and Their Risk for HIV Infection. Cureus. 2023 Nov 26 [cited 2025 Mar 2];15(11). Available from: https://www.cureus.com/articles /199189-applying-the-social-ecological-framework-to-link-the-drivers-of-inti mate-partner-violence-among-women-in-the-caribbean-and-their-risk-for-hi v-infection
- 61. Wubs A. Intimate partner violence among adolescents in South Africa and Tanzania. 2015.
- Krishnan S, Vohra D, de Walque D, Medlin C, Nathan R, Dow WH. Tanzanian Couples' Perspectives on Gender Equity, Relationship Power, and Intimate Partner Violence: Findings from the RESPECT Study. AIDS Res Treat. 2012 [cited 2025 Mar 2];2012(1):187890. Available from: https://onlinelibrary.wiley.c om/doi/abs/https://doi.org/10.1155/2012/187890

## Publisher's note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.