Research Article

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Prevalence and Determinants of Intimate Partner Violence Against Women in Burundi: Evidence from 2016-17 Demographic and Health Survey

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Abstract

Background: *Intimate Partner Violence against Women (IPVAW) is a human rights and public health problem worldwide and is associated with negative consequences for the mother, family, and community. The study aims to determine the prevalence and determinants of intimate partner violence among married women in Burundi, to inform strategies and programs to reduce domestic violence.*

Methods: *This study consists of the secondary analysis of the 2016-17 Burundi Demographic and Health Survey. The study population consisted of 6014 married women, interviewed using the domestic violence questionnaire. The research applied Chi-square tests and binary logistic regression to identify the factors influencing IPVAW in Burundi, at a 95% statistical significance.*

Results: *The study established the overall prevalence of IPVAW at 48.4%, whereas physical violence was 37.0%, sexual violence 24.4% and emotional violence 22.9%. Intimate partner violence varies by background characteristics of the women. The multivariate analysis identified as risk factors to IPVAW the age of the woman, the province of residence, the number of children ever born, the discordance within the couple on the number of children desired, the childhood experience of parental violence, the husband's controlling behaviour, the husband drinking alcohol and husband's age.*

Conclusion: *IPVAW is high in Burundi. Social, economic and cultural factors are some of the predictors of the high prevalence. These factors should constitute the basis for designing programmes and policies aimed at reducing IPVAW.*

Keywords: Burundi, Demographic and Health Surveys, Intimate partner violence, Domestic violence, Determinants

Abbreviations
BDHS: Burundi Demographic and Health Survey
IPVAW: Intimate Partner Violence Against Women
WHO: World Health Organization

1. Background

Intimate Partner Violence against Women (IPVAW) refers to "the behaviour within an intimate relationship that causes physical, sexual or psychological harm, including acts of physical aggression, psychological abuse and controlling behaviours" against a woman [1]. Although domestic violence cuts across age and sex, violence against women is the most widespread. Globally, 30% of all women who have been in a relationship have experienced intimate physical and or sexual abuse. Husband/partners constitute the perpetrators for as many as 38% of all murders of women [2].

Spousal violence against women is a rights violation and a serious public health issue, thus a limitation to the woman's capacity to participate in the family, community, and society at large. Target 5.2 of the Sustainable Development Goal 5 calls for United Nations Member States to "eliminate all forms of violence against all women and girls in public and private spheres." From a public health perspective, victims of IPVAW suffer adverse consequences such as injuries, chronic physical health problems, excess deaths, particularly neonatal, infant and child deaths. A regional study, which included Burundi, recommended considering IPVAW as an urgent priority in all programs and policies aimed at maximizing the infant and child survival and the safety and wellbeing of the mothers, in East Africa [3].

A WHO study found out that IPVAW was also associated with increased sexually transmitted infections, including HIV, depression, anxiety, post-traumatic stress disorders, self-harm,

and suicide [2]. Women victims of IPVAW were almost twice as likely to experience depression, and in some regions, they were 1.5 times more likely to contract HIV.

Some of WHO's findings in its multi-country study on women's health and domestic violence were that secondary education, high social-economic status, and formal marriage were protective factors [4]. In contrast, alcohol abuse, cohabitation, young age, attitudes supportive of wife-beating, having outside sexual partners, growing up with domestic violence, increased the risk of IPVAW.

Also, a study from Nigeria identified parity as a key explanatory variable of IPVAW [5]. It found out that the likelihood of IPVAW was lower among childless women than women with 2-3 children. On its part, a study from Angola detected the religious background and the frequency of attending church as the most important predictors of IPVAW [6].

A study from 28 international surveys aimed at assessing the relationship between women's asset ownership and experience of IPVAW found out that property had no significant association in 20 countries but was negatively associated with IPVAW in 3 and positively associated in 5 countries [7]. The husband's characteristics were more important than the woman's emancipation. For example, many studies identified the husband's alcohol drinking as an essential factor in the occurrence of IPVAW. In Peru, women married to heavy drinkers' husbands were almost nine times as likely to be victims of abuse [8].

Studies on IPVAW in Burundi are scarce. However, Burundi is part of some regional and global studies, and information on the prevalence and risk factors of IPVAW is findable in different reports of multi-country studies [3]. However, the literature research could not identify any research giving a broad overview of the prevalence and determinants of IPVAW at the national level for Burundi, hence the need for this study.

2. Methods
This study aims to determine the lifetime prevalence and underlying factors among women who were married/in-union at the time of the survey, to guide the formulation of strategies and programs targeting the reduction of IPVAW. The research hypothesis is that IPVAW results of the interplay of different factors: demographic, socio-economic and cultural.

This study consists of the secondary analysis of the 2016-17 Burundi Demographic and Health Survey (BDHS), which is the third DHS conducted in the country. For the first time, it included a module on domestic violence. It was a population-based survey, nationally representative, carried out from October 2016 to March 2017. It sampled about 16,620 households and interviewed 17,269 women of reproductive age, using a standard structured questionnaire, which is available on MeasureDHS website [9].

The sample was doubly stratified by province and urban/rural residence, and clustered by Enumeration Areas (EAs) of the 2008 national Census. The final report of the survey gives the details of the sampling methodology. Out of the 17, 269 women

interviewed using the women questionnaire; the survey selected 6401 ever-married/ever-partnered women, who reported having 'ever' experienced any form of violence perpetrated by the husband/partner.

The analysis used three approaches: Firstly, the univariate analysis used frequencies and percentages to describe the variables. Secondly, the study of the relationship between the dependent and the independent variables used cross-tabulations and chi-square tests. Thirdly, the multivariate analysis used logistic regressions to examine the association of the independent variables and the three dependent variables: physical, sexual, and emotional violence. All calculations used SPSS, version 26.0, with a 5% level of statistical significance.

2.1 The analysis used three dependent variables to capture the three forms of IPVAW:
2.1.1 Physical violence was assessed from the responses to questions on whether the husband ever
(i)   pushed, shocked, or threw something at her;
(ii)   Slapped;
(iii)   Punched by a fist or hit by something harmful;
(iv)   Kicked or dragged;
(v)   Strangled or burnt;
(vi)   Threatened With A Knife/Gun Or another weapon. A respondent had experienced intimate partner physical violence if she answered yes to at least one act of any of the items of physical violence mentioned above.

2.1.2 Emotional violence was assessed from responses to three questions whether the husband
(i)   Ever humiliated her,
(ii)   Ever threatened with harm and
(iii)   Ever insulted or made to feel bad. A respondent had experienced emotional violence if she answered yes to at least one act of any of the psychological violence aspects.

2.1.3 The sexual violence was assessed through questions whether the husband
(i)   Ever physically forced into unwanted sex,
(ii)   Ever forced into other unwanted sexual acts and
(iii)   Ever forced into other sexual acts, the respondents did not want. A respondent had experienced sexual violence if she answered yes to at least one item of any of the forms of sexual violence.

Items for physical violence had a Cronbach's alpha (α) of 0.69; those for sexual and emotional violence $\alpha=0.53$ and $\alpha=0.62$, respectively; any physical, sexual, or emotional violence with $\alpha=0.80$, indicating an overall excellent test performance of the interview questions.

A respondent had experienced IPVAW if she answered yes to at least one act of any form of violence (physical, sexual, or emotional).

3. Independent Variables
Independent variables included: women's characteristics (mothers' age, education, children ever-born, type of marriage, work status), husband characteristics (age, drink alcohol, controlling

behaviour, desire for children) and societal factors (province, type of residence, religion, wealth, sex of household head). These independent variables were selected for inclusion in the study based on their assumed association with IPVAW or importance in previous studies of IPVAW, as depicted in the literature review.

Some variables were regrouped from their original categories in the dataset, to make analysis and interpretation simpler and more meaningful. Recorded variables included:

- **Woman's Age:** self-reported age at the time of the interview, regrouped into < 30, 30-49 and 40-49 years.

- **Woman's Education:** The highest level of education attained by the respondent, regrouped into No education, primary, secondary +

- **Religion:** Self-reported religious affiliation at the interview. Catholic, Protestant, Muslim, and others.

- **Children Ever Born:** Self-reported number of ever-born children at the interview time, grouped into 0, 1-2, 3-4, and 5+.

- **Type of Marriage:** Self-reported kind of union, monogamous or polygamous.

- **Province:** The province in which the respondent lived at the time of the interview: 18 provinces

- **Type of residence:**
- **Type of place of residence:** Urban, Rural

- **Sex of the household head:** Whether the household was headed by a male or a female: M/F

- **Wealth status:** A composite index of household possessions, assets, and amenities derived using principal component analysis, regrouped as Poorest, Poorer, Middle, Richer, and Richest.

- **Working status:** Self-reported status of activity at the time of the interview: Y/N.
- **Media exposure:** a dichotomous variable, was created from responses to three specific questions about how often a respondent read newspapers, listened to the radio, or watched television. Responses were: 'no exposure' (N) or 'exposure' (Y).

Husband's desire for children: Reported number of children the woman and the husband want. The variable intends to reflect the linkage between fertility preferences and IPVAW. Three categories: Husband wants fewer children, the same number of children, more children.

Father's abuse: Self-reported childhood history of witnessing father beating the mother: Y/N

Alcohol drinker: Respondent reporting whether the husband/partner drinks alcohol: Y/N

Husband's controlling behaviour: A composite variable reflecting respondent self-reporting of five controlling behaviour displayed by the husband/partner. The respondent had to answer (i) whether the husband was jealous when the woman talks with other men; (ii) the husband accuses her of unfaithfulness; (iii) does not permit her to meet her friends; (iv) tries to limit her contact with family; insists on knowing where she is always Women responding Y to one or more questions were considered as having a partner/ husband with controlling behaviour. Those who answered N to all the items had no control issues.

Husband's Age: Age of the respondent's husband/partner reported by her at the interview, grouped into: <30, 30-49, and 40-49 years).

Husband's education: The highest level of education attained by the respondent's husband/partner, grouped into no education, primary education, secondary+ education.

4. Results

The women's median age in this study was 31.9 years; most of the respondents (93.9%) were Christians with 3.9% Muslims and 2.2% belonging to other religions (Table 1), distributed in the 18 provinces of the country.

Educational level was higher for men/partners than women: Forty-six per cent (46.4 %) of the women had no education, 41.1% had primary education and only 12.4% had secondary and higher education. More than half (51.7%) of the respondents had not heard about conjugal violence in the media.

The majority of the married women resided in the rural areas (83.8%), had an active status (87.4%) and were in monogamous unions (93.4%). About 40.8% of the women were in the lowest quintile of the wealth index, six women (59.7%) out of ten reported having witnessed their father beating the mother in their childhood, and 82.7% of the respondents lived in male-headed households. Only 4.3% of the women had no children, 29.3% had 1-2 children ever born, 31.4% had 3-4 children ever born, and 34.9% had five or more children ever born.

Slightly more than two-thirds (67.7%) of women had husbands who drunk alcohol, and only a third (31.9%) had husbands with controlling behaviours. The study population showed that 61.3% of the husbands desired the same number of children as their wives, 20.0% desired fewer children, whereas 18.7% of the husbands desired more children. On average, the husbands below 30 years old represented 24.2%, those between 30 and 40 years old 41.5%, and those above 40 years old 34.2%. The husbands' mean age was 36.5 years, which shows an average of 4.6 years difference between men and women, favouring men. Men were also more educated than women, with 49.3% having primary school against 41.1%.

Variable	Number	%
Mothers age		
<30	2839	44,4
30-39	2504	39,1
40-49	1058	16,5
	6401	100,0
Province		
Bubanza	365	5.7
Bujumbura Rural	331	5.2
Bururi	278	4.3
Cankuzo	345	5.4
Cibitoke	373	5.8
Gitega	397	6.2
Karuzi	411	6.4
Kayanza	348	5.4
Kirundo	407	6.4
Makamba	346	5.4
Muramvya	349	5.5
Muyinga	408	6.4
Mwaro	327	5.1
Ngozi	449	7.0
Rutana	317	5.0
Ruyigi	358	5.6
Bujumbura Mairie	271	4.2
Rumonge	321	5.0
	6401	100.0
Type of residence		
Urban	1038	16.2
Rural	5363	83.8
	6401	100.0
Sex of household head		
Male	5291	82.7
Female	1110	17.3
	6401	100.0
Wealth Status		
Poorest	1321	20.6
Poorer	1294	20.2
Middle	1243	19.4
Richer	1219	19.0
Richest	1324	20.7
	6401	100.0
Working status		
Not working	806	12.6
Working	5595	87.4
	6401	100.0
Children ever-born		
0	273	4.3

1-2	1887	29.5
3-4	2009	31.4
5+	2232	34.9
	6401	100.0
Mothers Education		
No	2971	46.4
Primary	2634	41.1
Secondary+	796	12.4
	6401	100.0
Media Exposure		
No Media	3312	51.7
Media	3089	48.3
	6401	100.0
Religion		
Catholic	3674	57.4
Protestant	2336	36.5
Muslim	249	3.9
Other	142	2.2
	6401	100.0
Type of marriage		
Monogamy	5947	93.4
Polygamy	423	6.6
	6370	100.0
Husband desire for children		
Same	3532	61.3
Less	1152	20.0
More	1079	18.7
	5763	100.0
Father Abuse		
No	3822	59.7
Yes	2579	40.3
	6401	100.0
Husband Controlling Behaviour		
No	4356	68.1
Yes	2045	31.9
	6401	100.0
Husband Drinks Alcohol		
No	2068	32.3
Yes	4333	67.7
	6401	100.0
Husbands Age		
<30	1551	24,2
30-39	2660	41,6
40-49	2190	34,2
	6401	100,0
Husbands Education		
None	2421	37,8

Primary	3157	49,3
Secondary+	823	12,9
	6401	100,0

Table 1: Background characteristic of the Study Population, 2016/17 Burundi Demographic and Health Survey, (n=6041)

5. Prevalence of different forms of IPVAW

Figure 1 shows that of the 6401 currently married women interviewed, 48.4% had ever experienced intimate partner violence. Physical violence (37.0%) is the dominant form of IPVAW, followed by sexual (24.4%) and emotional (22.9%) violence. Figure 2, on its part, shows the distribution of the different acts of abuse for the three forms of IPVAW. Slapping, forced unwanted sex and insults are the most common forms found in either category.
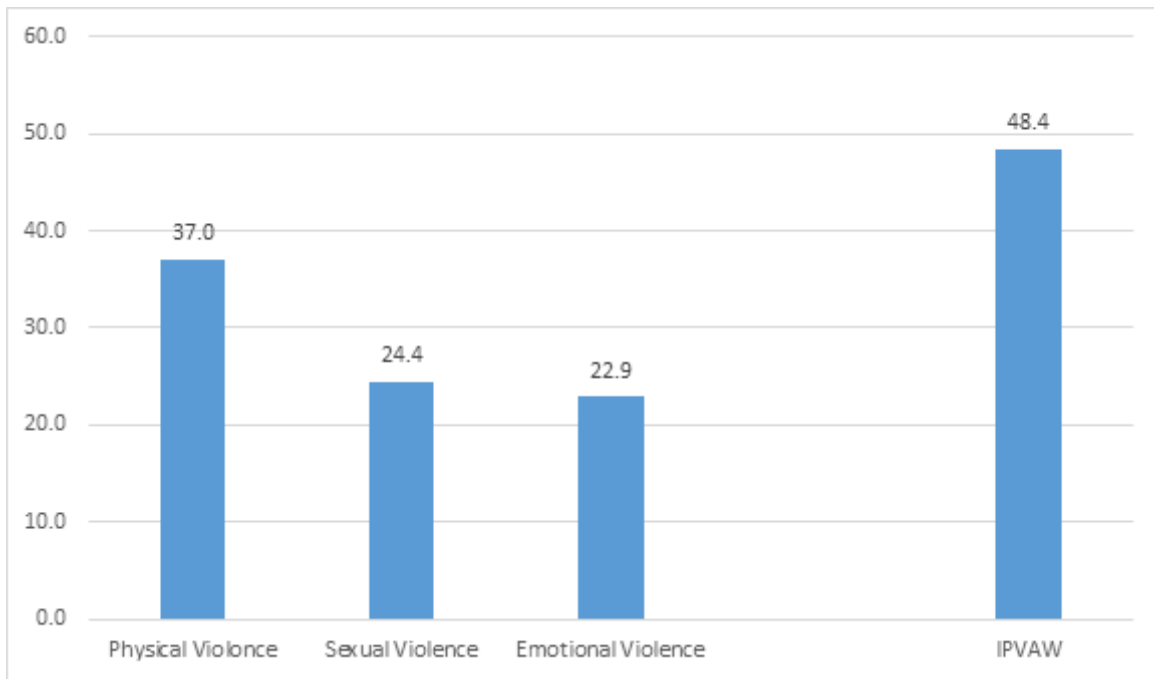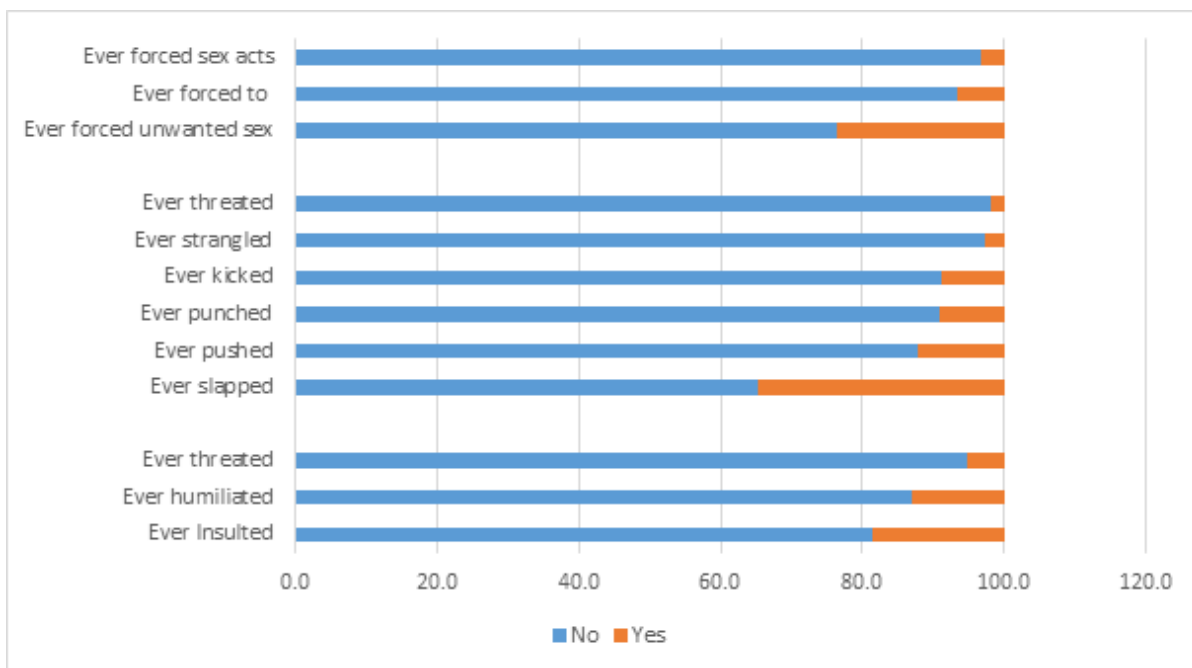

Figure 1: Prevalence of IPVAW in Burundi

Figure 2: Detailed IPVAW acts in Burundi

6. Bivariate analysis of and background variables

Table 2 presents the results of cross-tabulations of IPVAW with each one of the independent variables taken individually.

It shows that physical violence is significantly associated with women's age, the highest rate being among women aged 40-49 (43.1%). The distribution by province shows large disparities, women in Kirundo having the highest prevalence (60.2%) and those in Bujumbura-Mairie the lowest (22.1%).

The analysis found higher proportions of physical violence among rural women (38.6%), women whose husband is the household-head (38.6%); women in the poorest (44.9%) and the poorer (43%) categories of the wealth quintiles and women with an active status (38.6%). Higher proportions also characterized women with no education (43.0%), with primary education (35.4%), women affiliated to 'other religions' (52.1%) and those who witnessed parental abuse in their young age (46.8%).

The study found some husband's characteristics strongly associated with physical abuse of the woman: no education (43.0%) or only primary education (35.4%); husband desire fewer children (46.4%); husband drinks alcohol (44.6%); the husband has controlling behaviour (59.1%); is aged between 40 and 49 years (39.1%), has no education (42.4%).

The bivariate analysis established that psychological violence was positively associated with the respondent's age: The more the age increases, the more the risk of experiencing emotional abuse. The highest prevalence rate (26.6%) was in the age group 40-49. Regional disparities are visible, Rumonge province holding the highest prevalence rate (41.7%) and Mwaro the lowest (12.5%).

Other factors related to emotional violence were rural residence (23.5%); male as the household head (23.3%); wealth category (the poorest: 28%, the poorer: 25.1%); working status (24.5%); the number of children ever-born, the prevalence rate varying from 12.1% among childless women to 26.4% among women with 5+ children. Uneducated women (25.2%), those with

'others' as religious affiliation (38.7%), women in polygamous union (41.8%), those who witnessed father-mother maltreatment during their childhood (28.6%) had high prevalence rates of emotional violence.

Women whose husband desired fewer children (32.2%) or more children (28.0%); women whose husband had a controlling behaviour (47.2%) or drunk alcohol (27.6%); those whose husband had 'no education' (25.4%), or attained only primary education (22.9%), had high proportions of emotional violence.

The bivariate analysis has shown that sexual violence increased with the age of the women. The proportions of victims raised from 22.9% among women less than 30 years old to 26.6% among the aged 49+. Regional disparities were observable with the highest prevalence rates of victims in Muramvya province (44.7%) followed by Rumonge (42.1%) and the lowest in Bujumbura Mairie (12.2%).

Other factors related to sexual violence were the rural residence (25.9%), the male household head (25.1%), the low wealth status. In all wealth categories, except the richest (16.8%), a woman out of four or less (poorest: 27.9%; poorer: 26.0%; middle: 26.1% and richer: 25.6%) was subject to sexual abuse.
Non-active women (25.8%), those with five children ever born and those with no education (25.2%) or with only primary education (23.3%) displayed high proportions of sexual abuse. Women affiliated to 'other religions' (33.1%), those in polygamous union (36.2%); women whose husband desired fewer children (33.1%) or more children (27.2%) and those who had experienced father-mother abuse in their childhood (29.2%) were more likely to be the victim of sexual abuse.

Women whose husband's demonstrated controlling behaviour (41.8%), women whose husband drunk alcohol (28.4%), the married to older men in the age group 40-49 (25.9%), or having a husband with no education (27.1%) or with a primary school only (24.7%), had high prevalence rates of sexual violence.

	Physical		Emotional		Sexual	
Woman's age		p=0.000		p=0.001		p=0.024
<30	33,5		21,0		22,9	
30-39	38,3		23,6		25,3	
40-49	43,1		26,6		26,6	
	37,0		22,9		24,4	
Province		p=0.000		p=0.000		p=0.000
Bubanza	34.2		25.8		21.4	
Bujumbura Rural	31.1		19.9		13.0	
Bururi	23.0		21.6		29.5	
Cankuzo	47.0		31.3		30.4	
Cibitoke	32.4		20.4		29.8	
Gitega	37.0		21.4		23.4	
Karusi	42.1		13.9		13.1	
Kayanza	45.1		23.3		25.0	
Kirundo	60.2		33.4		37.1	
Makamba	27.5		25.1		19.9	

Muramvya	46.1		32.4		44.7	
Muyinga	32.6		13.5		15.2	
Mwaro	28.4		12.5		19.6	
Ngozi	41.6		25.6		18.5	
Rutana	33.8		20.2		23.3	
Ruyigi	28.8		14.2		23.5	
Bujumbura Mairie	22.1		16.6		12.2	
Rumonge	40.5		41.7		42.1	
	37.0		22.9		24.4	
Type of residence		p=0.000		p=0.012		p=0.000
Urban	28.4		19.9		16.9	
Rural	38.6		23.5		25.9	
	37.0		22.9		24.4	
Sex of household head		p=0.019		p=0.145		p=0.011
Male	37.6		23.3		25.1	
Female	33.9		21.3		21.4	
	37.0		22.9		24.4	
Wealth Status		p=0.000		p=0.000		p=0.000
Poorest	44.9		28.0		27.9	
Poorer	43.0		25.1		26.0	
Middle	38.5		23.7		26.1	
Richer	33.7		20.2		25.6	
Richest	24.8		17.6		16.8	
	37.0		22.9		24.4	
Work status		p=0.000		p=0.000		p=0.000
Not working	25.7		11.9		14.9	
Working	38.6		24.5		25.8	
	37.0		22.9		24.4	
Children ever born		p=0.000		p=0.000		p=0.000
0	17.6		12.1		19.4	
1-2	31.7		19.1		21.9	
3-4	38.1		24.1		24.4	
5+	42.7		26.4		27.2	
	37.0		22.9		24.4	
Mothers Education		p=0.000		p=0.000		p=0.000
No	43.0		25.2		26.5	
Primary	35.4		23.3		25.1	
Secondary+	19.7		13.3		14.7	
	37.0		22.9		24.4	
Media Exposure		p=0.000		p=0.575		p=0.065
No Media	39.6		23.2		25.4	
Media	34.2		22.6		23.4	
	37.0		22.9		24.4	
Religion		p=0.000		p=0.000		p=0.000
Catholic	39.2		22.3		24.4	
Protestant	33.2		22.8		25.0	
Muslim	30.5		23.7		14.5	

Other	52.1		38.7		33.1	
	37.0		22.9		24.4	
Type of marriage		p=0.000		p=0.000		p=0.000
Monogamy	35.5		21.5		23.6	
Polygamy	56.5		41.8		36.2	
	36.9		22.9		24.4	
Husband desire of children		p=0.000		p=0.000		p=0.000
Same	31.7		18.4		20.5	
Less	46.4		32.2		33.1	
More	43.4		28.0		27.2	
	36.8		23.0		24.3	
Father Abuse		p=0.000		p=0.000		p=0.000
No	30.4		19.1		29.2	
Yes	46.8		28.6		24.4	
	37.0		22.9		0.0	
Husband Controlling Behaviour		p=0.000		p=0.000		p=0.000
No	26.6		11.5		16.3	
Yes	59.1		47.2		41.8	
	37.0		22.9		24.4	
Husband Drinks Alcohol		p=0.000		p=0.000		p=0.000
No	21.0		13.2		16.2	
Yes	44.6		27.6		28.4	
	37.0		22.9		24.4	
Husbands Age		p=0.033		p=0.002		p=0.139
<30	35.3		21.0		24.0	
30-39	36.2		22.1		23.5	
40-49	39.1		25.4		25.9	
	37,0		22,9		24.4	
Husbands Education		p=0.000		p=0.000		p=0.000
None	42.4		25.4		27.1	
Primary	36.6		22.9		24.7	
Secondary+	22.4		16.0		15.3	
	37.0		22.9		24.4	

Table 2: Association of IPVAW by background variables, Burundi

7. Multivariate Analysis

Multivariate logistic regression was applied to analyze further the relationship between IPVAW and the independent variables of interest, after controlling for confounders. Table 3 shows the predictors of IPVAW in Burundi.

8. Physical Violence

The analysis detected a positive relationship between the women's age and her likelihood to experience physical violence. Women below 30 years old and those aged between 30 and 40 years were respectively 36% [AOR = 0.640 (0.487-0.841)] and 20% [AOR= 0.799 (0.648-0.985)] less likely to experience physical violence, compared to older women.

There were large disparities between provinces. Compared to Rumonge, women in the provinces of Bururi [AOR= 0.414 (0.266 – 0.645)], Makamba [AOR = 0.660 (0.454- 0.958)], Muyinga [AOR = 0.573 (0.397-0.828)], Mwaro [AOR= 0.639, 0.431- 0.948)] and Ruyigi [AOR= 0.616 (0.417- 0.912)] were less likely to report physical violence whereas those in the provinces of Kirundo [AOR= 1.632 (1.145-2.325)], Muramvya [AOR= 1.606 (1.110- 2.323)] and Ngozi [AOR = 1.482 (1.040 – 2.111)] were to report higher cases of physical violence.

Other categories of women who were less likely to experience physical violence were those who never had a child [AOR= 0.683 (0.582-0.800)], had 3-4 ever-born children [AOR = 0.666 (0.514-0.862)]; women in monogamous unions [AOR = 0.666 (0.514-0.862)], those whose husband desired the same number of children [AOR = 0.683 (0.582-0.800)] and women who did not experience a father-mother abuse during their childhood [AOR = 0.580 (0.512-0.657)].

Having a male as the household head was associated with a 30%

additional risk [AOR= 1.290 (1.081 – 1.539)] of physical abuse. Compared to the richest, women in low categories of the wealth quintiles had higher odds for victimization to physical violence: poorest [AOR= 1.3499 (1.031 – 1.765)], poorer [AOR = 1.369 (1.055 – 1.776)].

Women whose husband was not controlling [AOR= 0.251(0.220 – 0.287) or didn't drink alcohol [AOR = 0.362 (0.308-0.425)] were at a lower risk of experiencing physical violence. However, women whose husband was aged less than 30 [AOR= 1.706 (1.328 – 2.190)] and 30-39 [AOR = 1.232 (1.031-1.474)] were at a higher risk of experiencing physical abuse.

9. Emotional violence

Except for Muramvya, women in all other provinces enjoyed a protective effect against emotional violence, compared to the province of Rumonge, which was chosen as the reference, as shown in Table 3. Odds ratios ranged from 0.108 (0.068-0.170) for Muyinga to 0.557 (0.381-0.816) for Cankuzo.
Women who had never had a child or had 1-2 ever-born children were less exposed to emotional violence with respectively [AOR =0.402 (0.249-0.650)] and [AOR = 0.677 (0.527 – 0.871)].
Emotional violence was more likely to happen in a family headed by a male [AOR= 1.323 (1,074-1.630)] and in the lowest wealth status categories. It was 57% more likely to happen to the poorest [AOR= 1.573, (1.150 – 2.151)], and 43% more likely to occur to the poorer [AOR = 1.427 (1.053 – 1.935)], compared to the richest.

The woman's education was a protective factor identified in this study: Women with no education were 66% [AOR = 1.664 (1.195 – 2.319) and those with primary education 57% [AOR

= 1.568 (1.148 – 2.142)] more likely to experience emotional abuse than those who attained secondary and higher school.
Catholic women were at 47% [AOR= 0.529 (0.338-0.828)] lower risk of emotional violence compared to women affiliated to other religions, and women in monogamous unions were 32% [AOR= 0.682 (0.518-0.897)] at a lower risk than those in a polygamous marriage. Women whose husband desired the same number of children were 31% [AOR = 0.685 (0.570-0.824)] at a lower risk whereas those whose husband wanted fewer children were 29% at a higher risk of emotional violence, relatively to women with husband desiring more children.

10. Sexual Violence

All provinces, except Bujumbura-Mairie, Bujumbura Rural and Makamba, had lower odds of sexual violence than Rumonge (Table 3). Odds ratios ranged from 0.188 (0.125-0.284) in Gitega to 0.634 (0.444-0.904) in Cankuzo.

Women living in a male-headed household [AOR= 1.413 (1.163-1.716)], those with no education [AOR = 1.367 (1.004-1.861)] or with primary education [AOR= 1.406 (1.050-1.881)] and those whose husbands desired fewer children [AOR= 1.432 (1.169-1.755)] were at higher risk of sexual violence.
Women who were not working [AOR= 0.662 (0.521-0.842)]; Women whose husband desired the same number of children [AOR= 0.796 (0.670-0.947)]; women who didn't experience father-mother abuse during their childhood [AOR= 0.755 (0.659-0.864)]; who were not controlled by the husband [AOR= 0.278(0.242-0.319)] and whose husband didn't drink alcohol [AOR = 0.278 (0.242-0.319)]; were relatively protected against intimate sexual abuse.

Variables	Physical Violence			Emotional Violence			Sexual Violence		
Age	AOR	95 CI	AOR	95 CI	AOR	95 CI			
<30	0,640***	0,487	0,841	0,858	0,624	1,179	0,854	0,635	1,150
30-39	0,799*	0,648	0,985	0,900	0,706	1,148	1,036	0,825	1,301
>40									
Province									
Bubanza	0,829	0,569	1,208	0,392***	0,261	0,590	0,197***	0,125	0,312
Bujumbura Rural	0,920	0,624	1,357	0,361***	0,233	0,561	0,730	0,492	1,083
Bururi	0,414***	0,266	0,645	0,395***	0,251	0,620	0,587***	0,410	0,838
Cankuzo	1,274	0,892	1,820	0,557***	0,381	0,816	0,634*	0,444	0,904
Cibitoke	0,902	0,626	1,299	0,346***	0,231	0,518	0,480***	0,331	0,696
Gitega	0,994	0,693	1,424	0,370***	0,248	0,553	0,188***	0,125	0,284
Karusi	1,208	0,851	1,713	0,164***	0,106	0,253	0,518***	0,353	0,760
Kayanza	1,443*	0,996	2,092	0,398***	0,262	0,604	0,587***	0,415	0,832
Kirundo	1,632***	1,145	2,325	0,399***	0,274	0,582	0,356***	0,243	0,520
Makamba	0,660*	0,454	0,958	0,512***	0,347	0,756	1,396	0,973	2,004
Muramvya	1,606*	1,110	2,323	0,741	0,499	1,102	0,214***	0,143	0,319
Muyinga	0,573*	0,397	0,828	0,108***	0,068	0,170	0,367***	0,244	0,553
Mwaro	0,639*	0,431	0,948	0,147***	0,090	0,239	0,333***	0,227	0,489
Ngozi	1,482*	1,040	2,111	0,505***	0,343	0,744	0,418***	0,287	0,611
Rutana	0,812	0,561	1,175	0,318***	0,210	0,482	0,358***	0,240	0,535

Ruyigi	0,616*	0,417	0,912	0,182***	0,114	0,292	0,313***	0,184	0,533
Bujumbura Mairie	0,720	0,448	1,158	0,350***	0,207	0,593	0,904	0,695	1,176
Rumonge (R)									
Type of residence									
Urban	1,224	0,966	1,551	1,218	0,924	1,605	0,904	0,695	1,176
Rural (R)									
Sex of household head									
Male	1,290***	1,081	1,539	1,323***	1,074	1,630	1,413***	1,163	1,716
Female (R)									
Wealth Status									
Poorest	1,349*	1,031	1,765	1,573***	1,150	2,151	1,090	0,815	1,458
Poorer	1,369*	1,055	1,776	1,427*	1,053	1,935	1,017	0,767	1,349
Middle	1,290*	1,000	1,665	1,276	0,948	1,719	1,097	0,834	1,443
Richer	1,191	0,932	1,522	1,014	0,761	1,352	1,161	0,893	1,508
Richest (R)									
Work Status									
Not working	0,690***	0,562	0,847	0,476***	0,363	0,624	0,662***	0,521	0,842
Working (R)									
Children ever born									
0	0,683***	0,582	0,800	0,402***	0,249	0,650	0,721	0,480	1,084
1-2	1,104	0,910	1,339	0,677***	0,527	0,871	0,836	0,663	1,055
3-4	0,666***	0,514	0,862	0,838	0,686	1,023	0,884	0,734	1,064
5+ (R)									
Education									
No	1,949***	1,468	2,588	1,664***	1,195	2,319	1,367*	1,004	1,861
Primary	1,539***	1,177	2,012	1,568***	1,148	2,142	1,406*	1,050	1,881
Secondary+ (R)									
Media Exposure									
No Media	1,059	0,924	1,213	0,921	0,785	1,079	1,052	0,908	1,218
Media									
Religion									
Catholic	0,975	0,638	1,490	0,529***	0,338	0,828	0,932	0,596	1,456
Protestant	1,142	0,743	1,757	0,685	0,434	1,080	1,174	0,746	1,849
Muslim	1,469	0,849	2,542	0,943	0,520	1,710	0,766	0,413	1,420
Other (R)									
Type of marriage									
Monogamy	0,666***	0,514	0,862	0,682***	0,518	0,897	0,795	0,611	1,034
Polygamy (R)									
Husband desire for children									
Same	0,683***	0,582	0,800	0,685***	0,570	0,824	0,796***	0,670	0,947
Less	1,104	0,910	1,339	1,289*	1,038	1,601	1,432***	1,169	1,755
More (R)									
Father Abuse									
No	0,580***	0,512	0,657	0,719***	0,621	0,832	0,755***	0,659	0,864
Yes (R)									
Husband Controlling behaviour									
No	0,251***	0,220	0,287	0,148***	0,128	0,172	0,278***	0,242	0,319

Yes (R)									
Husband Drinks									
No	0,362***	0,308	0,425	0,393***	0,323	0,477	0,534***	0,448	0,638
Yes (R)									
Husband Age									
<30	1,706***	1,328	2,190	1,150	0,860	1,538	1,380***	1,054	1,806
30-39	1,232*	1,031	1,474	1,037	0,843	1,276	1,097	0,905	1,330
>40									
Education									
No	1,201	0,921	1,565	1,117	0,819	1,522	1,449	1,082	1,940
Primary	1,173	0,917	1,500	1,160	0,870	1,547	1,313	1,000	1,724
Secondary+ (R)									

Note: ***=p<0.001, *=p<0.05

Table 3: Risk factors for IPVAW in Burundi

11. Discussions

The study sought to establish the prevalence and determinants of IPVAW among married women in Burundi. The findings show that the overall prevalence rate was 48.4%, whereas physical violence was 37.0%, sexual violence 24.4%, and emotional violence 22.9%.

The overall prevalence of IPVAW indicates that the level of violence against women in Burundi is high, though it compares favourably with neighbouring countries. For instance, it was 68.2% in Democratic Republic of Congo, 54% in Uganda, 56% in Rwanda and 65.4% in Tanzania [10-13].

In this study, women reported physical, followed by sexual and emotional violence. This pattern contrasts with the finding from other countries like Ghana that reported emotional abuse, followed by physical violence and sexual violence as a general pattern [14]. A study from Uganda reported that 47% experienced physical violence, 46% emotional violence and 29% sexual violence. In contrast, a study from the Democratic Republic of Congo revealed that 53.6% of women had reported physical violence, 41.4% emotional violence, and 30% sexual violence [10]. The differences could mostly be attributable to differences in social, economic and cultural conditions in the various countries.

IPVAW levels seem to increase with the mother's age, women in the age group 40+ having higher proportions of 'ever' experienced physical violence. The high prevalence observed among older women could be due to increased exposure to violence, as most of these could be old and been married for a longer time. This relation has also appeared in other studies, like in Nepal [15].

The prevalence of IPVAW depends in no small extent on the province of residence. Studies conducted in other countries such as Malawi, Zambia have also demonstrated variations of IPVAW by region [16, 17]. A Rwandan's research revealed that IPVAW was highest in the Northern Province, where the rate was 45.6%, and the lowest in Kigali City with a 28.8% prevalence rate [12]. Regional differences in IPVAW could be attributable to the differences in the regions' social and economic conditions. These conditions contribute to the characteristics of the population residing in each province. Studies indicate regional disparities in the distribution of infrastructures such as roads, health, and educational facilities in most developing countries. It can be argued that in regions that are better equipped with such facilities and could be said to be more developed, the risk for IPVAW is lower than in the less developed areas. In certain regions, IPVAW may reflect different cultural practices that may reinforce specific values and norms.

The study found that IPVAW was significantly associated with the sex of head of household. It was high among women residing in households headed by men. The importance of the sex of head of household is also underscored in a study in Bangladesh even though in that study woman living in a female-headed home had higher odds of experiencing IPVAW [18]. Two plausible explanations could be responsible for this relationship. First, it can be argued that in female-headed households, there is no intimate partner to abuse the women. Second, it is also possible that in female-headed homes, women are empowered to voice their concern when the intimate partner abuses them.

The study found out that IPVAW was positively associated with a childhood experience of abuse. In particular, women who had witnessed their father abusing their mother are more likely to report domestic violence against women. This finding is similar to what research revealed in other countries: Ghana, Ethiopia, Nigeria [14,19,20]. Another explanation is that growing up in an atmosphere of domestic violence may induce an attitude of acceptance toward spousal abuse.

The study also found that IPVAW was significantly associated with wealth index and work status. It was high among working women and women with low wealth status. This finding is consistent with results from the Democratic Republic of Congo, Malawi, Zambia and Zimbabwe [10,16,17,21]. One possible explanation is that when women work and have an income of their own, it challenges the patriarchy system, undermining the husband's superiority, which induces domestic violence against women.

Another factor that is significantly associated with IPVAW in Burundi is the number of children ever born. The study found

out that IPVAW increases with the number of children ever born. In general, women who have more children ever born were more likely to experience IPVAW. Studies conducted in other countries have also revealed that IPVAW was significantly associated with high parity: Ethiopia, Nigeria, Nepal, Zimbabwe [15,19,20,21]. This finding is no surprise given that as the number of children increases, there is increased pressure on the family, especially fathers who in patriarchal societies are the head of household, to fend for their families. This pressure may result in conflicts and violence.

The study has also found that the incidence of IPVAW was high among women in polygamous than monogamous marriages. This finding is consistent with results from other countries: Afghanistan(22), Democratic Republic of Congo, Mozambique, Ghana, Uganda, Nigeria, Rwanda [11,12,20,22-24]. One possible explanation for this is that there is increased competition for resources and attention among wives living in the same household, resulting in pressure on the husbands to manage the situation. Both the competition among wives and pressure on the husband may result in tension and conflict.

Furthermore, the study indicates that IPVAW in Burundi was significantly associated with the husband's behavioural characteristics. Women whose husband drunk alcohol displayed high odds of sexual, emotional and physical violence. This finding is consistent with results from other countries: Democratic Republic of Congo, Ethiopia, Ghana, India, Malawi, Rwanda, Nigeria, Haiti, Zambia [10,12,16,20,24,26,27]. The available literature suggests that alcohol consumption can weaken mental and physical function and cause infidelity and aggressive behaviour [17]. Also, alcohol consumption competes with other household expenses such as food and clothing, which may give rise to marital tension and conflict [14,17].

The study also identified the husband's desire for children as a critical factor influencing both forms of violence. Discordance among the couple about the number of children they want may result in tension and conflict in the family. Violence enables some men to resolve disagreements over the use of contraception, for example, by imposing their fertility preferences on their partners [29].

The study also found that IPVAW in Burundi was high among women whose husband had controlling behaviour. Besides, about a third of women in Burundi reported having husbands with controlling behaviour. Women with such partners were at increased risk of experiencing intimate partner violence, which is similar to what other researchers have reported in Haiti, Nigeria, the Philippines [27,30,31]. Other commentators on this subject have argued that husbands often use violence to control their wives [32].

12. Strengths and Limitations
The present study has some limitations. First, the study design is cross-sectional; the analyzed variables can only confirm a statistical association's existence but not a causal relationship between the variables and IPVAW. Second, there may be a possibility of recall bias as the study entailed self-reported data without any means of verification on the woman's entire lifetime. Also, secondary data restricted the potential to sufficiently assess the influence of some characteristics, such as cultural practises as drivers of IPVAW. Nonetheless, the use of a large nationally representative data set constitutes a strength for the study.

13. Conclusion
In conclusion, this study has found out that IPVAW was widespread in Burundi. The research has demonstrated that domestic violence against women in the country was associated with various social and economic characteristics of both men and women. There is a need to conduct further studies to explore additional cultural factors.

The study recommends addressing the social and economic imbalances between men and women that perpetuate patriarchy. Focusing on the economic empowerment of women alone may not only increase but also unlikely to stop IPVAW. Economic interventions need to include husbands, families and communities to change societal gender norms and values. There is also a need to strengthen Information, Education and Communication activities on IPVAW, paying particular attention to men.

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