Correlates Of Intimate Partner Violence Among Ugandan Women Age 20-29 Years: A Cross-sectional Survey

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Abstract

Abstract Background: In Uganda, just like in many sub-Saharan countries, studies on Intimate Partner Violence (IPV) among women age 20-29 years are limited. The aim of this study was to determine correlates of IPV among Ugandan women age 20-29 years.

Methods: The 2016 Uganda Demographic and Health Survey (UDHS) data was used, and a weighted sample of 2765 women who had been in a union and age 20-29 years were selected from the Domestic Violence module. Frequency distributions were used to obtain the background and other IPV related characteristics of the women while chi-square tests established the relationship between IPV and the explanatory variables. Binary logistic regressions established the factors that were associated with IPV. Results: More than half (52%) of the women age 20-29 years experienced some form of IPV. Sexual IPV was the least prevalent (22%) and almost 4 in 10 women (36% and 38%) experienced physical and emotional IPV respectively. Factors associated with all the different forms of IPV included partner’s education, witnessing parental violence, partner’s controlling behaviors, marital duration, number of co-wives and frequency of being drunk by the partner. Age difference, age at first marriage and woman’s education were associated with emotional, physical and sexual violence respectively. Conclusion: IPV towards Ugandan women age 20-29 years was high. This calls for its reduction through collective efforts that target men to address issues like excessive alcohol consumption, controlling behaviors and raising awareness among others. Intervention programs aimed at countering perpetration and tolerance of violence in the home setting should be promoted. Keywords: Intimate partner violence, Alcohol, Witnessing parental violence, Controlling behaviors, Uganda

Introduction

Globally, gender-based violence (GBV) also commonly referred to as domestic violence has
gained momentum as a social, health and human rights issue [1, 2]. Of all forms of GBV, intimate partner violence (IPV), which involves all physical, controlling behaviors, sexual, or psychological harms aggravated by a current or former partner is the most common [3, 4]. The incidence of IPV is more severe in women compared to men with approximately 30% of women worldwide reporting violence by an intimate partner at some point in their life [5–7]. In low and middle income countries (LMICs), the prevalence of IPV is about 37% among women age 15–69 years, while for those aged 20–24 and 25–29 years, IPV prevalence is 44% and 46% respectively [8]. These last two specific age groups record the highest prevalence of IPV in these LMICs.

In Uganda, just like in many LMICs, IPV is still a big contributor to GBV with a prevalence level of 40% among ever partnered women in the 12 months preceding the 2016 UDHS survey, which rate surpasses that of the world (30%) [9, 10]. Whilst IPV has generally declined among women in the reproductive years, its prevalence remains unacceptably high among women age 20–29 years. It also contributes greatly to morbidity and mortality and its consequences are many, notable ones including unwanted pregnancies, sexually transmitted infections, miscarriages, unsafe abortions, stillbirths, premature labour, low birth weight, anxiety, depression among others [10–13]. Additionally, national statistics revealed that more than half (51%) of the cases of violence go unreported in Uganda partly due to tolerance or acceptance of violence and beliefs like men are unconditionally entitled to sex in some of the cultures in Uganda [9].

Consequently, several studies on IPV in Uganda have been done in consonance with Article 33 of the Constitution of the Republic of Uganda and the Domestic Violence Act 2010 [14–19]. Specifically, many of these studies and policies spell out the need for women to gain full and equal dignity of the person of the man through undermining prohibitive laws, cultures and traditions that dent the status of women.
However, even with this massive research on the subject of IPV, the same cannot be said on factors responsible for its high prevalence among women age 20–29 years. Previous studies have been generic as they have looked at IPV among all women in the reproductive years. Studies on the women age 20–29 years in Uganda are limited and yet the extent of IPV for the same age group is at 43% and 41% for the women ages 20–24 and 25–29 years respectively, in the 12 months prior to the 2016 UDHS survey [9]. For both age groups, the IPV prevalence rates are higher than the national average of 40% among all women in the reproductive age 15–49 years. Additionally, most studies focus on only one or two forms of IPV rather than on all forms of IPV. Everybody is therefore duty-bound to get involved in the campaign(s) to end all forms of violence especially among women who are the prime victims. Accordingly, this study sought to establish the correlates of IPV among Ugandan women age 20–29 years.

The findings of the study support and enrich the existing body of knowledge and understanding of IPV through examining factors associated with IPV among Ugandan women, age 20–29 years. The study findings are beneficial to policy makers, and program implementers in informing the design and implementation of an IPV management framework specific to these young women. As such, the study findings contribute to Uganda’s achievement of Sustainable Development Goal 16 which emphasizes reduction of all forms of violence and urges governments and communities to find lasting solutions to conflict and insecurity [20]. Beyond the territorial boundaries of Uganda, the study may spur research into areas tailored to countries’ specific conditions.

IPV being a complex and multifaceted global issue, it required some theoretical approaches to explain it [21, 22]. The nested ecological framework theory [23–25] and the social learning theory [23, 26, 27] were used to conceptualize this study. The study was supported by Silva, Valongueiro [22] theoretical and conceptual framing. Silva,
Valongueiro [22] model explored an understanding of multi-level hierarchical relationships at the proximal, intermediate and distal levels.

In this study, the background factors were categorized into socio-demographic factors and economic empowerment. Socio-demographic factors like age, residence, woman’s education attainment, region, wealth status, partner’s education, age difference have been associated with IPV [1, 13-15, 19, 28-31]. Economic empowerment of women, assessed in terms of a woman owning a house or land (either alone or jointly with a partner) or receiving cash payment for their work was the other risk factor. These worked through intermediate factors (partners’ behavioral factors, history of violence and marital factors) to bring about experience of IPV. These intermediate factors, most especially partner controlling behaviors precede and catalyse experience of IPV [15, 32]. Also, harmful use of alcohol by a husband/partner was associated with increased likelihood of committing violence against the partner [13, 17, 33, 34]. Incidents of children witnessing parental violence build up histories of violence and were highly associated with IPV [1, 13, 29].

Methods

Data Source

The study used the 2016 Uganda Demographic Health Survey (UDHS) dataset [9]. The UDHS (2016) was a cross-sectional nationally representative dataset capturing national and sub-national estimates including but not limited to domestic violence and IPV in particular.

This survey employed a two stage stratified sampling procedure and cluster sampling design based on the sampling frame from the 2014 Population and Housing Census [9, 35]. The domestic violence module however was based on the shortened and modified version
of the Conflict Tactics Scale (CTS) [36]. An in-depth description of the sampling procedure
is reported in the 2016 UDHS report [9].

Study Population and Sample Size

This study was confined to women age 20–29 years selected in the domestic violence
module which had 9232 women aged 15–49 years. From this sample, women who had
never been in union, those below 20 years and above 29 years were excluded.
Accordingly, a total weighted sample of 2765 women was considered for analysis.

Variables and Measures

Outcome variables

The outcome variables were the three different forms of IPV (emotional, physical and
sexual) and an aggregate of all the three forms. An aggregate measure of any IPV
combined the three forms of IPV. The dependent variables were based on the following set
of questions asked to women in the survey. Women indicated whether their
husbands/partners had ever or did;

Hit, slap, kick or do anything else to hurt them physically?
Force them to have intercourse or perform any other sexual acts against their will?
Say something to humiliate them in front of others, threaten to hurt them or someone they care about,
insult them or make them feel bad.

The response expected was either ‘yes’ or ‘no’; with ‘yes’ to the questions a, b, and c
implying experience of physical, sexual and emotional IPV respectively and ‘no’ implying
non-experience of IPV. In addition, a ‘yes’ to any of the three questions a, b and c implied
experience of any IPV and a ‘no’ implied non-experience of any IPV.

Measures of explanatory variables

The independent variables were classified into two categories: background factors which
included socio-demographic factors and economic empowerment and intermediate factors
which included partners’ behavioral factors, history of witnessing parental violence and
marital factors.

The socio-demographic characteristics included women’s age group, place of residence, women’s education level, region, wealth status index, partner’s education and age difference. Economic empowerment included ownership of property (house and land) and type of earning from a woman’s work. It was obtained by merging women responses to questions: does a respondent: a) own a house? b) own land [either alone or jointly with a partner for both questions (a) and (b)] and c) the type of earning from her work. Responses to these questions were recoded into two categories (0 = Not empowered, 1 = Empowered).

Partners’ behavioral factors comprised of partner’s controlling behaviors, partner’s alcohol consumption and frequency of a husband/partner being drunk. To measure partner’s controlling behaviors, women responses were sought on the question “Does your partner ever or did; a) Prohibit you to meet female friends? b) Limit you contact your family? c) Insist on knowing where you are at all times? d) Is jealousy if you talk with other men? and e) Frequently accuses you of being unfaithful?” These were merged into one variable called partner’s controlling behaviors. A yes to any of the above questions implied presence of partner’s controlling behaviors and a no implied non-existence of such behaviors. Partner’s alcohol consumption was measured by whether the respondent’s partner drank alcohol (with a binary outcome of 0 = No, 1 = Yes). Frequency of a partner being drunk was a follow-up question to those respondents whose partners indicated that they drank alcohol.

History of violence comprised witnessing parental violence and was measured by getting responses as to whether the respondent’s father ever beat her mother. It had a binary outcome (0 = No, 1 = Yes). The study also considered marital factors which included marital duration, number of co-wives and age at first cohabitation/marriage. Number of
co-wives and age at first marriage had binary outcomes, marital duration was categorised as 0 = 0–4 years, 1 = 5–9 years and 2 = 10+ years. In this paper, the term “partner” included husbands and also partners in cohabiting unions.

Statistical Analyses

Data analysis was done using STATA version 13 at three levels: univariate, bivariate and multivariate. Descriptive statistics, Pearson chi-square tests and logistic regression were done at univariate, bivariate and multivariate levels respectively. The multivariate analysis assessed the net influence of the explanatory factors on experience of emotional, sexual, physical and any IPV.

Results

Prevalence of IPV

Almost an equal number of women experienced both physical and emotional forms of IPV (36% and 38% respectively), sexual IPV was least common (22%) and overall, majority (52%) of the women experienced any IPV.

Descriptive characteristics of respondents

Table 1 presents the background characteristics of respondents. More than half (52%) of the women were aged 20–24 years, resided in rural areas (74%), had primary level education (58%), were economically empowered (82%) and their partners had majorly primary education (50%). Fifty-four percent reported an age difference of 0–5 years with their partners. There was nearly an even distribution of women by region, although Northern contributed the least number (19%) and Central region the highest (30%). One respondent in 4 women was from the richest wealth quintile (25%).

Table 1 about here

In Table 2, other IPV related factors are presented. The majority of women experienced
partner controlling behaviors (74%), married after 18 years (56%) and never had co-wives (81%). About 2 in 5 women witnessed parental violence (35%) and had marital durations of 0-4 years (40%) and 5-9 years (42%). Women whose partners’ used to take alcohol were 38%.

Table 2 about here

Association between IPV and explanatory variables

Table 3 presents cross tabulations for associations between the different explanatory variables and experience of the different IPV forms. Factors such as residence, woman’s education, partner’s education, region, wealth status, partners’ alcohol consumption, frequency of partner being drunk, event of witnessing parental violence, marital duration, number of co-wives, age at first marriage and presence of partner controlling behaviors were significantly associated with emotional, sexual, physical and any IPV. However, age was not associated with any of the forms of IPV. Economic empowerment status was only related to emotional IPV while partner age difference only showed a relationship with emotional and any IPV.

Remarkably and across all models, more women age 25–29 years, residing in rural areas, belonging to poor and middle wealth quintiles and those who witnessed parental violence experienced all forms of IPV. There was an almost even distribution of IPV by region. Women whose partners had controlling behaviors, consumed alcohol and had more than one wife experienced more IPV compared to their colleagues while those whose partners had secondary+ education had the least prevalence of IPV.

Table 3 about here

Multivariate Results

In Table 4, the net influence of explanatory variables on occurrence of emotional, sexual,
physical and any IPV is presented. For all the modals, the variables that were not significant at the bivariate level of analysis were excluded.

Table 4 about here

Education of the woman was only associated with sexual IPV as women with secondary+ education had less odds (OR = 0.55; 95% CI: 0.32–0.94) of experiencing sexual violence compared to their counterparts with no education.

Partner’s education was highly associated with all the forms of IPV. Particularly, women whose partners had primary education had increased odds of experiencing emotional IPV (OR = 1.83; 95% CI: 1.18–2.82), sexual IPV (OR = 1.92; 95% CI: 1.16–3.16), physical IPV (OR = 2.58; 95% CI: 1.66–4.01) and any IPV (OR = 2.06; 95% CI: 1.30–3.25) in comparison to those whose partners never had any education. Men with secondary+ education were also more likely (OR = 1.78; 95% CI: 1.10–2.88) to perpetrate physical IPV to their partners.

Region influenced emotional, sexual and any IPV. The odds of experiencing emotional IPV were higher among women in Northern (OR = 1.58; 95% CI: 1.11–2.25) and Western Uganda (OR = 2.62; 95% CI: 1.91–3.60). Sexual IPV was however more likely to be found in the Eastern (OR = 1.63; 95% CI: 1.10–2.42) and Western regions (OR = 1.69; 95% CI: 1.19–2.39) of Uganda than the Central region. Overall, the odds of experiencing any IPV were higher among women in Western Uganda (OR = 2.05; 95% CI: 1.49–2.83) compared to those in Central Uganda.

Partner’s alcohol consumption influenced only emotional IPV, as women whose partners’ used to drink alcohol had less odds of experiencing emotional IPV (OR = 0.60; 95% CI: 0.36–0.99) in relation to those whose partners did not.

The frequency of a husband/partner being drunk had influence on all forms of IPV. Actually, women whose partners were “often” drunk had more odds of experiencing
emotional violence (OR = 4.39; 95% CI: 2.44-7.91), sexual violence (OR = 2.57; 95% CI: 1.42-4.68), physical violence (OR = 3.99; 95% CI: 2.27-7.02) and any IPV (OR = 4.26; 95% CI: 2.35-7.71) compared to those whose partners never used to drink. Similarly, women whose partners “sometimes” got drunk were also more likely to experience emotional IPV (OR = 2.27; 95% CI: 1.34-3.85), physical IPV (OR = 1.98; 95% CI: 1.21-3.24) and any IPV (OR = 2.59; 95% CI: 1.57-4.26).

Partner controlling behaviors were strongly associated with all forms of IPV. Women whose partners had controlling behaviors had increased odds of experiencing emotional IPV (OR = 8.55; 95% CI: 6.31-11.60), sexual IPV (OR = 4.81; 95% CI: 3.30-7.00), physical IPV (OR = 4.78; 95% CI: 3.63-6.30) and any form of IPV (OR = 6.61; 95% CI: 5.20-8.41).

Further, witnessing parental violence equally influenced IPV. All women who witnessed parental violence had more odds of experiencing emotional IPV (OR = 1.85; 95% CI: 1.48-2.32), sexual IPV (OR = 1.88; 95% CI: 1.49-2.35), physical IPV (OR = 1.75; 95% CI: 1.42-2.17) and any IPV (OR = 2.03; 95% CI: 1.64-2.51) compared to their colleagues who did not.

Marital duration had a significant association with all forms of IPV. The odds of experiencing emotional IPV were higher among women with 5-9 years’ marital duration (OR = 1.51; 95% CI: 1.18-1.95) and 10+ years’ marital duration (OR = 1.77; 95% CI: 1.28-2.44) compared to those with 0-4 years’ marital duration. For sexual IPV, only women with 5-9 years’ marital duration had increased odds (OR = 1.46; 95% CI: 1.12-1.90) in comparison to those with 0-4 years’ marital duration. Only women with 5-9 and 10+ years’ marital duration had increased odds (OR = 1.59; 95% CI: 1.23-2.05 and OR = 1.40; 95% CI: 1.01-1.94 respectively) of experiencing physical IPV. In the overall model, all the women with 5-9 and 10+ years of marital duration had increased odds (OR = 1.51; 95% CI: 1.19-1.92 and OR = 1.68; 95% CI: 1.22-2.30 respectively) of experiencing any IPV.
compared to those with 0–4 years’ marital duration.

The number of co-wives a woman had was a predictor of IPV for all the modals. Women having one or more co-wives had increased odds of experiencing emotional IPV (OR = 1.34; 95% CI: 1.02–1.77), sexual IPV (OR = 1.35; 95% CI: 1.01–1.80), physical IPV (OR = 1.53; 95% CI: 1.16–2.02) and any IPV (OR = 1.35; 95% CI: 1.02–1.79) than those who never had co-wives.

Age at first marriage only influenced physical IPV. Women who married after 18 years were less likely (OR = 0.75; 95% CI: 0.59–0.94) to experience physical violence compared to their colleagues who married before the age of 18 years.

Another correlate of IPV was age difference, which showed a significant association with emotional IPV. Women who were younger than their partners and having 0–5 years’ age gap had decreased odds (OR = 0.54; 95% CI: 0.30–0.97) of experiencing emotional IPV compared to those who were older than their partners.

Discussion

The aim of this study was to establish the correlates of IPV among Ugandan women age 20–29 years. The prevalence of IPV among these women was relatively high (52%) compared to an average of 45% for other LMICs [8]. From the results, partner’s education, witnessing parental violence, partner controlling behaviors, marital duration, number of co-wives, frequency of partner being drunk, partner taking alcohol, region, woman’s education, age at first marriage and age difference were significantly associated with IPV in various ways.

Women’s education was significantly associated with sexual and it provided a protective effect against sexual IPV, as women with secondary education or higher had less odds of experiencing sexual violence compared to those with no education. Studies elsewhere in Ethiopia [37], India [38] and the WHO multi-country study [13] confirmed the relationship
between education and IPV, of which sexual IPV forms part. The possible explanation for this finding could be that education provided information and resources about domestic violence, raises their earning powers, and empowers women.

Partner’s education influenced all forms of IPV. Women whose partners had primary education were more likely to experience all the forms of IPV. Recent UDHS statistics [9] and other studies [38, 39] reported a similar finding. Since most men with primary education lack better paying jobs and are at times stressed economically, they tend to use violence as a tool to resolve their differences and to command respect in their home. This could help explain this finding. Also, this study found out that even women whose partners had secondary+ education were more likely to experience physical IPV. This seems to contradict other studies in India and South Africa [38, 39]. The probable explanation for this could be that their study population was not 20-29 years or the cultural norms like men beating up their partners in case they make any mistake, which norms many men still uphold up to now.

Region had its influence on emotional, sexual and any IPV. Particularly, women in the Eastern and Northern regions of Uganda had more odds of experiencing sexual and emotional IPV respectively. This finding is agreeable to those in studies by Karamagi, Tumwine [40] and Annan and Brier [41] where structural factors like gender inequality, devastating poverty, alcoholism and corruption in police were reported to sustain IPV.

Women in Western Uganda had increased odds of experiencing emotional, sexual and any IPV compared to those in Central region. This finding is in agreement with that in a study by Wandera, Kwagala [19]. The social acceptance of violence as a tool to resolve conflicts in relationships for some societies in Uganda alongside weak implementation of community sanctions against IPV could explain this finding.

Witnessing parental violence was another correlate that had influence across all forms of
IWP. Women who witnessed their fathers beat their mothers were more likely to experience all the forms of violence compared to their colleagues who did not. The probable explanation for this result could be due to visual learning as an effective mind mapping tool in promotion of a community of practice. Also, the social learning theory’s argument that perpetration and acceptance of violence are a learned behavior could help explain this finding since men perpetrate violence because they witnessed their fathers’ violent actions towards their mothers and women accept violence because they saw their mothers being abused by their fathers. Some of the recent studies in Uganda and other parts of the World have reported a similar trend [19, 29, 42, 43].

Women whose partners had controlling behaviors were more likely to experience all forms of IPV and similar findings have been reported in Uganda [14, 15, 19] and WHO multi-country study [13]. The dowry that men pay could help explain this finding since most men and the society generally view such women as a property of their husbands so long as bride price was paid.

Marital duration’s influence spread over all the forms of IPV as women with longer marital durations had increased odds of experiencing violence compared to their colleagues with shorter durations. This finding contradicted that by Urquia, O’Campo [44] who indicated that much as marital duration was significantly associated with IPV, it is only women with shorter marital duration who experienced more IPV than those with longer durations. The explanation for this could be that these women with longer marital durations remain in these abusive relationships for the sake of their children and the fear of humiliation that society bestows to those that divorce.

Once one’s desire to drink becomes uncontrollable, alcoholism becomes inevitable and this catalyzes experience of violence. Similarly, the frequency of a partner being drunk was another predictor of emotional, sexual, physical and any IPV. Women whose partners
were either often or sometimes drunk had increased odds of experiencing IPV compared to their colleagues whose partners did not. Perhaps the men who perpetrate violence to their partners while drunk blame it on alcohol when they sober up. Supportive literature to this finding was stated in studies [17, 34, 45] which indicated that harmful use of alcohol and/or problem drinking was a precursor to experience of IPV. The study also found out that partner’s alcohol consumption influenced only emotional IPV, with women whose partners used to take alcohol having decreased odds of experiencing emotional violence compared to their colleagues whose partners did not take alcohol. A possible explanation for this finding could be that these women’s partners take alcohol intermittently, say on celebrations and parties. This finding contradicts studies in Uganda [17, 34] and elsewhere [45, 46].

Except in the Muslim religion where co-wives are a common religious practice, having co-wives can fuel violence. Similarly, the number of co-wives a woman had was another predictor of emotional, physical and any IPV. Women with co-wives were all more likely to experience these forms of IPV. This result is similar to that by WHO [13], where men with multiple wives perpetrated violence to their partners.

Age at first marriage was significantly associated with physical IPV. The legal age at marriage in Uganda is 18 years. Women who married after 18 years were less likely to experience physical violence in relation to those who married before the age of 18. Studies in Canada [44] and India [47] were in agreement with this study’s finding. This is possibly due to these women having a relatively high relationship power and can thus make certain independent decisions free from influence of their partners.

The age difference between a woman and her partner was also strongly correlated with emotional IPV. Age difference had a protective effect as women who were younger and with a shorter age gap were less likely to experience emotional violence compared to their
colleagues who had a bigger age gap. Other scholars such as Teitelman, Tennille [48] and Volpe, Hardie [49] have reported a similar finding. Perhaps these women were submissive to their partners who were older than them.

**Study Limitations**

The key limitation was using cross-sectional data. First, we cannot ascertain causality among key variables. In addition, self-reporting of different forms of IPV is associated with social desirability biases. Notwithstanding the limitations, this study provides a robust estimation of the different forms of IPV among women age 20–29 years using a nationally representative sample.

**Conclusion**

Different forms of IPV among women age 20–29 years were associated with various factors. First, the correlates of emotional IPV included partner’s education, partner controlling behaviors, partner’s alcohol consumption, frequency of a partner being drunk, witnessing parental violence, region, marital duration, number of co-wives and age difference.

Second, sexual IPV was influenced by woman’s education, partner’s education, partner controlling behaviors, frequency of partner being drunk, witnessing parental violence, region, number of co-wives and marital duration.

Third, physical IPV was associated with partner’s education, partners’ controlling behaviors, frequency of partner being drunk, witnessing parental violence, marital duration, number of co-wives and age at first marriage.

Finally, experiencing any form of IPV was associated with partners’ education, partners’ controlling behaviors, frequency of partner being drunk, witnessing parental violence, region, marital duration and number of co-wives.
List Of Abbreviations
GBV Gender Based Violence
IPV Intimate Partner Violence
UDHS Uganda Demographic and Health Survey

Declarations
Ethics approval and consent to participate
The study is based on secondary data analysis of the 2016 UDHS. Approval to use this dataset was sought from the DHS Program, ICF International.

Consent for Publication
Not Applicable

Availability of data and material
The datasets generated and/ or analysed during the study are available in the DHS Program repository, available at www.dhsprogram.com

Competing interests
The authors declare that they have no competing interests.

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Authors’ contributions
DG conceptualized, designed, reviewed literature, analyzed the data and drafted the manuscript. EN and SOW participated in the conceptualization, study design, and drafting of the manuscript. All authors reviewed and approved the final manuscript.

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### Table 1: Socio-demographic background characteristics of Respondents

| Background characteristics       | Frequency (n) | Percent (%) |
|----------------------------------|---------------|-------------|
| **Age**                          |               |             |
| 20-24                            | 1445          | 52.3        |
| 25-29                            | 1320          | 47.7        |
| **Residence**                    |               |             |
| Urban                            | 722           | 26.1        |
| Rural                            | 2043          | 73.9        |
| **Education**                    |               |             |
| No education                     | 140           | 5.1         |
| Primary                          | 1607          | 58.1        |
| Secondary+                       | 1018          | 36.8        |
| **Partner’s education**          |               |             |
| No education                     | 176           | 7.4         |
| Primary                          | 1188          | 50.0        |
| Secondary+                       | 1012          | 42.6        |
| **Region**                       |               |             |
| Central                          | 838           | 30.3        |
| Eastern                          | 719           | 26.0        |
| Northern                         | 516           | 18.7        |
| Western                          | 692           | 25.0        |
| **Wealth status**                |               |             |
| Poorest                          | 531           | 19.2        |
| Poorer                           | 540           | 19.5        |
| Middle                           | 500           | 18.1        |
| Richer                           | 515           | 18.6        |
| Richest                          | 679           | 24.6        |
| **Age difference**               |               |             |
| Wife older                       | 69            | 2.9         |
| 0-5 age gap                      | 1282          | 54.0        |
| 6+ age gap                       | 1025          | 43.1        |
| **Economic empowerment status**  |               |             |
| Not empowered                    | 494           | 17.9        |
| Characteristics                                | Frequency (n) | Percent (%) |
|-----------------------------------------------|---------------|-------------|
| Witnessing parental violence                  |               |             |
| No                                            | 1795          | 64.9        |
| Yes                                           | 970           | 35.1        |
| Marital duration                              |               |             |
| 0-4 years                                     | 1101          | 39.8        |
| 5-9 years                                     | 1160          | 42.0        |
| 10+ years                                     | 504           | 18.2        |
| Number of co-wives**                          |               |             |
| None                                          | 1,917         | 80.7        |
| One or more co-wives                         | 459           | 19.3        |
| Age at first marriage                         |               |             |
| Below 18 years                                | 1,222         | 44.2        |
| 18 or more years                              | 1,543         | 55.8        |
| Partner controlling behaviors                 |               |             |
| No                                            | 719           | 26.0        |
| Yes                                           | 2046          | 74.0        |
| Partner takes alcohol                         |               |             |
| No                                            | 1726          | 62.4        |
| Yes                                           | 1039          | 37.6        |
| Frequency of partner being drunk              |               |             |
| Never                                         | 1856          | 67.1        |
| Often                                         | 315           | 11.4        |
| Sometimes                                     | 594           | 21.5        |
| Total                                         | 2,765         | 100         |

*Frequencies do not add up to 2765 because of missing responses and/or filters that dropped some questions when certain criterion was not met.*
| Characteristics       | Emotional IPV | Sexual IPV | Physical IPV | Any IPV | Total |
|-----------------------|---------------|------------|--------------|---------|-------|
|                       | p-value | n     | p-value | n     | p-value | n     | p-value | n     | p-value | n     |       |
| Age group             |         |       |         |       |         |       |         |       |         |       |       |
| 20-24                 | (0.33)  | 37.3  | (0.6)   | 21.6  | (0.7)   | 35.7  | (0.80)  | 52.1  | 144     |       |       |
| 25-29                 | (0.58)  | 39.2  | (0.9)   | 22.3  | (0.80)  | 36.5  | (0.69)  | 52.6  | 132     |       |       |
| Residence             | (0.00)  |       | (0.01)  |       | (0.00)  |       | (0.00)  |       |         |       |       |
| Urban                 | (0.00)  | 31.8  | (0.6)   | 16.8  | (0.7)   | 29.6  | (0.80)  | 43.6  | 721     |       |       |
| Rural                 | (0.00)  | 40.4  | (0.80)  | 23.7  | (0.70)  | 38.4  | (0.69)  | 55.4  | 204     |       |       |
| Education             | (0.00)  |       | (0.00)  |       | (0.00)  |       | (0.00)  |       |         |       |       |
| No education          | (0.00)  | 40.2  | (0.33)  | 23.0  | (0.70)  | 37.6  | (0.53)  | 53.5  | 140     |       |       |
| Primary               | (0.00)  | 44.7  | (0.6)   | 26.0  | (0.70)  | 44.0  | (0.60)  | 60.1  | 160     |       |       |
| Secondary+            | (0.00)  | 27.5  | (0.80)  | 15.3  | (0.70)  | 23.5  | (0.55)  | 39.8  | 101     |       |       |
| Region                | (0.00)  |       | (0.00)  |       | (0.00)  |       | (0.00)  |       |         |       |       |
| Central               | (0.00)  | 27.5  | (0.33)  | 17.6  | (0.6)   | 26.3  | (0.80)  | 40.0  | 838     |       |       |
| Eastern               | (0.00)  | 38.9  | (0.6)   | 26.5  | (0.6)   | 38.7  | (0.60)  | 56.0  | 719     |       |       |
| Northern              | (0.00)  | 42.9  | (0.70)  | 18.4  | (0.80)  | 45.6  | (0.80)  | 58.4  | 516     |       |       |
| Western               | (0.00)  | 47.1  | (0.80)  | 24.9  | (0.70)  | 38.2  | (0.58)  | 58.7  | 692     |       |       |
| Wealth status         | (0.00)  |       | (0.00)  |       | (0.00)  |       | (0.00)  |       |         |       |       |
| Poorest               | (0.00)  | 47.2  | (0.33)  | 23.3  | (0.6)   | 49.1  | (0.64)  | 64.8  | 531     |       |       |
| poorer                | (0.00)  | 42.3  | (0.6)   | 25.2  | (0.6)   | 42.2  | (0.58)  | 58.6  | 540     |       |       |
| Middle                | (0.00)  | 40.3  | (0.70)  | 25.4  | (0.6)   | 38.0  | (0.54)  | 54.9  | 500     |       |       |
| Richer                | (0.00)  | 37.0  | (0.80)  | 21.9  | (0.6)   | 31.0  | (0.49)  | 49.4  | 515     |       |       |
| Richest               | (0.00)  | 27.1  | (0.80)  | 15.6  | (0.6)   | 23.5  | (0.38)  | 37.8  | 679     |       |       |
| Partner's education   | (0.00)  |       | (0.00)  |       | (0.00)  |       | (0.00)  |       |         |       |       |
| No education          | (0.00)  | 31.0  | (0.48)  | 14.8  | (0.6)   | 25.4  | (0.44)  | 44.1  | 176     |       |       |
| Primary               | (0.00)  | 41.6  | (0.6)   | 23.6  | (0.6)   | 42.0  | (0.58)  | 57.6  | 118     |       |       |
| Secondary+            | (0.00)  | 29.1  | (0.80)  | 16.6  | (0.6)   | 24.6  | (0.40)  | 40.9  | 101     |       |       |
| Age difference        | (0.02)  |       | (0.5)   |       | (0.7)   |       | (0.00)  |       |         |       |       |
| Wife older            | (0.02)  | 52.1  | (0.6)   | 25.6  | (0.80)  | 38.2  | (0.62)  | 62.4  | 69      |       |       |
|                                | p-value | n   | p-value | n   | p-value | n   | p-value | n   |
|--------------------------------|---------|-----|---------|-----|---------|-----|---------|-----|
| 0-5 age gap                    | 0.01    | 433 | 0.01    | 248 | 0.01    | 424 | 0.01    | 615 |
| 6+ age gap                     | 0.01    | 375 | 0.01    | 209 | 0.01    | 343 | 0.01    | 518 |
| Economic empowerment status    | (0.01)  |     | (0.6)   |     | (0.1)   |     | (0.11)  |     |
| Not empowered                  | 32.6    | 161 | 23.2    | 114 | 32.5    | 160 | 48.2    | 238 |
| Empowered                      | 39.4    | 895 | 21.6    | 491 | 36.9    | 837 | 53.3    | 1208|
| Partner controlling behaviors  | (0.00)  |     | (0.00)  |     | (0.00)  |     | (0.00)  |     |
| No                             | 11.4    | 82  | 6.2     | 44  | 14.1    | 101 | 21.7    | 156 |
| Yes                            | 47.6    | 973 | 27.5    | 561 | 43.8    | 896 | 63.1    | 1290|
| Partner takes alcohol          | (0.00)  |     | (0.00)  |     | (0.00)  |     | (0.00)  |     |
| No                             | 32.0    | 553 | 19.1    | 330 | 28.6    | 493 | 44.9    | 775 |
| Yes                            | 48.4    | 503 | 26.5    | 275 | 48.6    | 505 | 64.6    | 671 |
| Frequency of partner being drunk| (0.00) |     | (0.00)  |     | (0.00)  |     | (0.00)  |     |
| Never                          | 31.7    | 588 | 18.8    | 348 | 28.2    | 523 | 44.5    | 826 |
| Often                          | 65.7    | 207 | 36.2    | 114 | 68.1    | 215 | 79.2    | 250 |
| Sometimes                      | 43.9    | 260 | 24.1    | 143 | 43.7    | 259 | 62.4    | 370 |
| Witnessing parental violence   | (0.00)  |     | (0.00)  |     | (0.00)  |     | (0.00)  |     |
| No                             | 31.9    | 572 | 17.6    | 317 | 29.8    | 535 | 44.9    | 807 |
| Yes                            | 49.8    | 483 | 29.8    | 289 | 47.7    | 463 | 65.9    | 640 |
| Marital duration               | (0.00)  |     | (0.00)  |     | (0.00)  |     | (0.00)  |     |
| 0-4 years                      | 29.3    | 323 | 17.4    | 191 | 25.6    | 282 | 43.0    | 473 |
| 5-9 years                      | 42.3    | 491 | 25.1    | 291 | 41.9    | 486 | 56.9    | 660 |
| 10+ years                      | 48.0    | 241 | 24.5    | 123 | 45.7    | 230 | 62.2    | 313 |
| Number of co-wives             | (0.00)  |     | (0.01)  |     | (0.00)  |     | (0.00)  |     |
| None                           | 33.6    | 643 | 18.8    | 360 | 30.8    | 590 | 47.1    | 903 |
| One or more co-wives           | 43.5    | 200 | 24.9    | 114 | 44.2    | 203 | 59.5    | 273 |
| Age at first marriage          | (0.00)  |     | (0.03)  |     | (0.00)  |     | (0.00)  |     |
| Below 18 years                 | 45.0    | 549 | 24.4    | 298 | 46.0    | 562 | 61.2    | 747 |
| 18+ years                      | 32.8    | 506 | 20.0    | 308 | 28.2    | 435 | 45.3    | 699 |
| Total                          | 1055    |     | 606     |     | 998     |     | 1446    |     | 276    |
Table 4: Results of logistic regressions of the different forms of IPV and the explanatory factors

| Characteristics            | Model on emotional IPV |                       | Model on sexual IPV |                       |
|-----------------------------|-------------------------|-----------------------|----------------------|-----------------------|
|                             | OR  | 95% CI          | p-value | OR  | 95% CI          | p-value |
| Residence                   |     |                 |         |     |                 |         |
| Urban (RC)                  | 1.00| (1.00-1.00)     | 1.00    | 1.00| (1.00-1.00)     | 1.00    |
| Rural                       | 1.03| (0.75-1.42)     | 0.86    | 1.05| (0.74-1.50)     | 0.78    |
| Education                   |     |                 |         |     |                 |         |
| No education (RC)           | 1.00| (1.00-1.00)     | 1.00    | 1.00| (1.00-1.00)     | 1.00    |
| Primary                     | 1.07| (0.72-1.58)     | 0.75    | 0.88| (0.57-1.38)     | 0.59    |
| Secondary+                  | 0.75| (0.47-1.20)     | 0.23    | 0.55| (0.32-0.94)     | 0.03    |
| Partner's education         |     |                 |         |     |                 |         |
| No education (RC)           | 1.00| (1.00-1.00)     | 1.00    | 1.00| (1.00-1.00)     | 1.00    |
| Primary                     | 1.83| (1.18-2.82)     | 0.01    | 1.92| (1.16-3.16)     | 0.01    |
| Secondary+                  | 1.51| (0.95-2.40)     | 0.08    | 1.73| (1.01-2.95)     | 0.05    |
| Region                      |     |                 |         |     |                 |         |
| Central (RC)                | 1.00| (1.00-1.00)     | 1.00    | 1.00| (1.00-1.00)     | 1.00    |
| Eastern                     | 1.38| (0.98-1.96)     | 0.07    | 1.63| (1.10-2.42)     | 0.02    |
| Northern                    | 1.58| (1.11-2.25)     | 0.01    | 0.95| (0.61-1.47)     | 0.82    |
| Western                     | 2.62| (1.91-3.60)     | 0.00    | 1.69| (1.19-2.39)     | 0.00    |
| Wealth status               |     |                 |         |     |                 |         |
| Poorest (RC)                | 1.00| (1.00-1.00)     | 1.00    | 1.00| (0.70-1.41)     | 0.98    |
| Poorer                      | 0.97| (0.71-1.31)     | 0.83    | 1.00| (0.70-1.41)     | 0.70    |
| Middle                      | 1.03| (0.71-1.49)     | 0.88    | 1.28| (0.88-1.85)     | 0.20    |
| Richer                      | 0.99| (0.68-1.44)     | 0.96    | 1.04| (0.69-1.55)     | 0.86    |
| Richest                     | 1.09| (0.71-1.67)     | 0.68    | 1.10| (0.67-1.83)     | 0.70    |
| Partner takes alcohol       |     |                 |         |     |                 |         |
| No (RC)                     | 1.00| (1.00-1.00)     | 1.00    | 1.00| (1.00-1.00)     | 1.00    |
| Yes                         | 0.60| (0.36-0.99)     | 0.04    | 0.75| (0.42-1.34)     | 0.33    |
|                                 | 1.00 |                           | 1.00 |                      | 1.85 |  (1.48-2.32) | 0.00 | 1.88 |  (1.49-2.35) | 0.00 |                           | 1.00 |                           | 1.00 |                      |
|---------------------------------|------|---------------------------|------|----------------------|------|---------------|------|------|---------------|------|---------------------------|------|---------------------------|------|----------------------|
| Witnessing parental violence    |      |                           |      |                      | Yes  |               |      |      |               |      |                           |      |                           |      |                      |
| No (RC)                         | 1.00 |                           | 1.00 |                      |      |               |      |      |               |      |                           |      |                           |      |                      |
|                                  |      |                           |      |                      | Yes  |               |      |      |               |      |                           |      |                           |      |                      |
|                                 |      |                           |      |                      |      |               |      |      |               |      |                           |      |                           |      |                      |
| Partner controlling behaviors   |      |                           |      |                      | No (RC) |               | 1.00 |  1.00 |               |      |                           |      |                           |      |                      |
|                                 |      |                           |      |                      | Yes  |               |      |      |               |      |                           |      |                           |      |                      |
|                                 |      |                           |      |                      |      |               |      |      |               |      |                           |      |                           |      |                      |
| Economic empowerment            |      |                           |      |                      | Not empowered (RC) |               | 1.00 |  1.00 |               |      |                           |      |                           |      |                      |
|                                 |      |                           |      |                      | Empowered |               | 1.14 |  (0.89-1.47) | 0.30 |  0.83 |  (0.56-1.24) | 0.36 |                           |      |                           |      |                      |
| Marital duration                |      |                           |      |                      | 0-4 years (RC) |               | 1.00 |  1.00 |               |      |                           |      |                           |      |                      |
|                                 |      |                           |      |                      | 5-9 years |               | 1.51 |  (1.18-1.95) | 0.00 |  1.46 |  (1.12-1.90) | 0.01 |                           |      |                           |      |                      |
|                                 |      |                           |      |                      | 10+ years |               | 1.77 |  (1.28-2.44) | 0.00 |  1.39 |  (0.97-1.99) | 0.07 |                           |      |                           |      |                      |
| Number of co-wives              |      |                           |      |                      | None (RC) |               | 1.00 |  1.00 |               |      |                           |      |                           |      |                      |
|                                 |      |                           |      |                      | One or more co-wives |               | 1.34 |  (1.02-1.77) | 0.04 |  1.35 |  (1.01-1.80) | 0.04 |                           |      |                           |      |                      |
| Age at first marriage           |      |                           |      |                      | Below 18 years (RC) |               | 1.00 |  1.00 |               |      |                           |      |                           |      |                      |
|                                 |      |                           |      |                      | 18+ years |               | 0.91 |  (0.72-1.15) | 0.44 |  1.15 |  (0.85-1.55) | 0.36 |                           |      |                           |      |                      |
| Age difference                  |      |                           |      |                      | Wife older (RC) |               | 1.00 |  1.00 |               |      |                           |      |                           |      |                      |
|                                 |      |                           |      |                      | 0-5 age gap |               | 0.54 |  (0.30-0.97) | 0.04 |  0.86 |  (0.44-1.67) | 0.66 |                           |      |                           |      |                      |
|                                 |      |                           |      |                      | 6+ age gap |               | 0.60 |  (0.34-1.11) | 0.11 |  0.90 |  (0.47-1.70) | 0.74 |                           |      |                           |      |                      |
| Frequency of partner being drunk|      |                           |      |                      | Never (RC) |               | 1.00 |  1.00 |               |      |                           |      |                           |      |                      |
|                                 |      |                           |      |                      | Often |               | 4.39 |  (2.44-7.91) | 0.00 |  2.57 |  (1.42-4.68) | 0.00 |                           |      |                           |      |                      |
|                                 |      |                           |      |                      | Sometimes |               | 2.27 |  (1.34-3.85) | 0.00 |  1.51 |  (0.85-2.68) | 0.16 |                           |      |                           |      |                      |