

Intimate Partner Violence and Age Disparity: a multi-country analysis

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Abstract

The association between intimate partner violence (IPV) and age difference between intimate partners (age gap) is a relationship that is yet to be clarified by various studies. We investigated this association using Demographic and Health Surveys (DHS) dataset on domestic violence from seven countries. This analysis indicates that there is an association between IPV and age gap, but there is no clear trend in the association among the countries examined. For instance, in Burkina Faso, the risk is high when the woman has a partner of closer age and the risk reduces when the ages begin to diverge. On the contrary, Nepal and Kyrgyz Republic reported that the risk of experiencing IPV increases when the man is between 17.5 years and 22.5 years older than the woman. Therefore, further analysis of other DHS datasets on domestic violence needs to be carried out to give more information on the association between IPV and age gap.

Declaration

I, the undersigned, hereby declare that the work contained in this research project is my original work, and that any work done by others or by myself previously has been acknowledged and referenced accordingly.

A handwritten signature in blue ink, appearing to read 'F. O. Otieno', is written on the page.

Fanuel Omondi Otieno, 22 May 2014

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1. Introduction

1.1 Intimate Partner Violence

Intimate partner violence (IPV) is defined as the emotional, physical, sexual and psychological abuse that occurs between intimate partners (Hattery, 2009). The acts of physical violence include slapping, beating, kicking, choking, hitting, burning, the use of weapons and acts of violence that results into death (Jordan and Nietzel, 2004). On the other hand, acts of sexual violence include forced sexual intercourse and other sexual harassment. Emotional and psychological abuse constitute constant humiliations by the intimate partner, belittling and insults (Hattery, 2009). In addition, the controlling behaviour by an intimate partner constitutes IPV in the sense that a partner is isolated from family and friends, they have limited access to financial resources, and their movements are constantly monitored. Consequently, IPV has grown to be a large global public health problem.

1.2 Scope of the Problem

Statistics on the impact of intimate partner violence shows that 4.8 million acts of IPV are reported by women in U.S. each year (Hattery, 2009). It is also reported that in U.S., 1544 women were murdered in 2004 by their former or current intimate partners (Hattery, 2009). Another analysis carried out by the U.S. Department of Justice, indicates that 31,260 women were killed by their intimate partners from 1976 to 1996. Furthermore, 1 out of 4 women report having sex with their male partners against their will (Hattery, 2009). According to World Health organization (WHO), 10–69% of women in 48 population-based surveys reported being physically abused by their intimate partners. From the national view, 10–34% of women reported physical abuse by their intimate partners (WHO). Studies carried out from different countries in the world indicates that 40–70% of female murders are committed by their intimate partners (WHO). In addition, Jordan and Nietzel (2004) wrote that between 1 in 3 women experience physical abuse in the hands of an intimate partner at some point during their lives and 1 in 12 women experience IPV annually.

The consequences of IPV are enormous. They go beyond the happiness of individuals and their health to affecting the entire household and even the entire community. IPV lowers the self esteem of a woman, and hence, limits her participation in the development of the world (Krug et al., 2002). IPV is associated with various short term and long term health problems including, physical injuries, chronic pain syndromes, gastrointestinal disorders, suicidal and depression behaviours (Loue, 2001). IPV can lead to unplanned pregnancies or premature labour and eventually premature birth. In addition, women who are prone to IPV are likely to be infected with HIV/AIDS and sexually transmitted diseases (Loue, 2001).

1.3 Age Disparity in Intimate Relationships

Age disparity refers to the difference between the ages of intimate partners. This paper considers age disparity as the male partner's age minus the female partner's age. It is also referred to as the age gap between two intimate partners. For instance, Beauclair and Delva (2013) in their study on age disparity in relationships defined age disparate relationships as relationships where the age gap between

two spouses is at least five years. A study done by David Buss found that most men desire to have a younger intimate partner (Robbins, 1996). Moreover, David Buss states that women preferred dating older men (Robbins, 1996). However, men in Canada, U.S., Australia and Northern Europe preferred marrying women close to their ages than men in Latin America, the middle East, Asia and Africa (Robbins, 1996).

Research suggests that when the ages of intimate partners are close together, the chances of a successful marriage are higher than when the ages of the intimate partners begin to diverge (Robbins, 1996). The divergence in age results into generational differences, which can lead to instability in marriages. The instability in marriages can result in violence towards the female partner and even separation or divorce (Robbins, 1996). Consequently, this paper seeks to determine how age gap contributes to intimate partner violence using data from the Demographic and Health Surveys (DHS).

1.4 Demographic and Health Surveys (DHS)

Demographic and Health Surveys (DHS) are "nationally-representative surveys that provide data for a wide range of monitoring and impact evaluation indicators in the areas of population, health and nutrition" (DHS). DHS is implemented by International Coaching Federation (ICF) and is funded by United States Agency for International Development (USAID) (Kishor and Johnson, 2004).

DHS operates in phases and each phase takes approximately 4–5 years. Each phase has additional elements in the questionnaire compared to the one used in the previous phase. Hitherto, DHS has covered phases I-IV. DHS surveys collect primary data using standard core questionnaires including household questionnaire, women's questionnaire and men's questionnaire. Individuals eligible for interviews include women of reproductive age, 15–49 years old and men aged 15–59 years. Individual questionnaires collect information on family planning, child health, fertility and domestic violence (Kishor and Johnson, 2004). Consequently, this paper will use information collected on domestic violence to report the prevalence of IPV and the association that exist between age gap and IPV.

1.5 Objectives

This project used specific set of objectives that guided the findings. The objectives are:

- To report the prevalence of intimate partner violence among women from different DHS countries.
- To determine the association between women's experience of IPV and age gap.

Other studies have also been carried out to investigate the existence of an association between IPV and age gap. This is covered in chapter two, which covers the literature review. The third chapter covers the methodology, which constitute the sampling method used by DHS, the methods of data collection, source of data and the countries under study, methods of data analysis, and ethical considerations. The fourth chapter gives the details of the data analysis from the prevalence of specific indicators of IPV to the association that exists between IPV and age gap.

2. Literature Review

2.1 Risk Factors Linked to a Woman's Experience of IPV

Many studies have associated men's ability of insulting an intimate partner to factors such as low income, lower literate level, drug abuse and alcohol consumption, parental violence and age gap. The stated factors contribute to IPV in different ways.

2.1.1 Alcoholism. Alcohol has been shown to play a role in the sexual assaults, as well as influencing the use of drugs such as cocaine (Krug et al., 2002). Drinking alcohol leads to an impaired judgement resulting in a man being violent when drunk. A meta-analysis done by Black et al. indicated that there is a significant association between excessive drinking and IPV with a correlation coefficient between $r=0.21$ and $r=0.57$ (Krug et al., 2002). Moreover, a population-based study done in Costa Rica, Cambodia, India, Chile, El Salvador, Canada, Brazil, Nicaragua, Venezuela, South Africa and Spain found that there is a significant relationship between a woman experiencing IPV and the drinking habit of their partner (Krug et al., 2002).

2.1.2 Low Income. Low income has been linked to IPV. Studies have shown that low income results in IPV as opposed to a high income. A study done in India, for example, indicated that a family with high income is protective against IPV (Jeyaseelan et al., 2007). Furthermore, according to (Kishor and Johnson, 2004), women who are poor are more likely to experience IPV than women who are not poor. Poverty is not necessarily considered as a cause of IPV, but it increases the risk of experiencing IPV (Kishor and Johnson, 2004).

2.1.3 Parental Violence. Parental violence is likely to influence how their children respond to IPV when they grow up. Male partners who grew up in violent families in which the mother experienced IPV are likely to be violent towards their partners (Krug et al., 2002). Studies done in Spain, Cambodia, Brazil, Canada, Chile, Costa Rica, Indonesia, Venezuela and El Salvador found that women married to men who were beaten as children or who saw their mothers experience IPV were likely to experience IPV (Krug et al., 2002). Moreover, Jordan and Nietzel (2004) states that a woman is prone to physical violence if she witnessed her father committing any form of IPV against her mother.

2.1.4 Age gap. This is also another factor that is linked to woman's experience of IPV. It is discussed in the next section.

2.2 Relationship Between Age Gap and IPV

The relationship between age gap and IPV has been studied by a good number of authors and conflicting results have been made. Shackelford et al. (2002) carried out a study to determine the hypothesis that the violent nature of the male partner is an act to control the female partners and that IPV decreases with the increasing age of the female partner. The results from this study show that IPV decreases when the female partner approaches 45 years, which is associated with the menopause period. In addition, women in their reproductive age are 10 times likely to experience IPV than women who have reached their menopause period (Shackelford et al., 2002). Shackelford et al. (2002), further states that young women who are in an intimate relationship with older men are likely to experience intimate partner violence. Moreover, men who are aged 45 years and above are not committing IPV to same age

partners, instead, they are committing IPV to partners who are younger than them (Shackelford et al., 2002).

According to Kelly et al. (2003), there was a need to assess the association between age difference in sexual partners and the risk of contracting HIV-1 among female adolescents and young adults in rural Uganda. In this study the age gap between partners was grouped as men who were 0–4 years older, 5–9 years older, and at least 10 years older (Kelly et al., 2003). The results indicated that HIV-1 prevalence among female participants was high among those with older sexual partners. Specifically, the association was high among female adolescent with partners 10 or more years older. Moreover, the women whose partners were younger, had a higher HIV prevalence compared to women having partners of the same age. This result is attributed to fear of violence from an older partner.

Difference in the age of spouses where by the male partner is older than the female partner, is characterised with power imbalances in the relationships because age grants seniority which is associated to power and control of the younger female partner (Kishor and Johnson, 2004). Kishor and Johnson (2004) in their study established that age difference between intimate partners is significantly associated with the likelihood of having experienced IPV in countries such as Haiti, Egypt, Dominican Republic, Nicaragua, Peru and Colombia. In Dominican Republic, 27% of women who are married to a younger man reported to have experienced IPV in comparison with 18% of women who are married to a older man (Kishor and Johnson, 2004). India reported a case in which IPV increased steadily with an increase in the age of the male partner (Kishor and Johnson, 2004).

Another study carried out by Jewkes et al. (2006) found that women in a relationship with an older partner are likely to experience IPV. One of the findings was that young women are at risk of having an HIV infection due to a greater age difference between themselves and their intimate partners (Jewkes et al., 2006). When comparing the characteristics of women with HIV and women without HIV, Jewkes et al. (2006) states that women with HIV have partners who are older than them, more educated and are likely to earn more money. Furthermore, having an intimate partner three or more years older was associated with IPV.

Similarly, another study was done by (Roberts et al., 2006) to establish the features of abusive relationships among adolescents. They examined the association between being physically and verbally abused and various characteristic of relationships such as engaging in sexual intercourse with the intimate partner, age gap between intimate partners, age at relationship initiation and duration of the relationship. The study shows that being involved in sexual intercourse had a strong association with verbal and physical abuse in heterosexual adolescent relationships (Roberts et al., 2006). Moreover, (Roberts et al., 2006) states that increased length of relationship was associated with verbal abuse, but not with physical abuse, in both males and females. In addition, physical abuse by an intimate partner was associated with having a partner 3 or more years younger among males (Roberts et al., 2006). Finally, verbal abuse by intimate partner was evident among males with an older age at the time of the relationship initiation.

Hindin et al. (2008) in their study of IPV among couples in ten DHS countries found that there was a significant association between IPV and age gap. The countries they considered were: Kenya, Moldova, Rwanda, Zambia, Zimbabwe, Haiti, Malawi, Bolivia, Bangladesh and Dominican Republic. Among these countries only Zambia reported a significant association between IPV and age gap. It was reported in Zambia that there was a lower risk of IPV for women whose intimate partners are at least five years older and a higher risk of IPV for women whose age is closer to their intimate partner (Hindin et al., 2008). Women who are older than their intimate partners in Zambia were also at risk of experiencing IPV (Hindin et al., 2008).

Furthermore, a study was carried out by Pandey et al. (2009) in Calcutta slum in India to examine the relationship factors linked to domestic violence. The study found varying results about age difference between intimate partners and domestic violence. A narrow age gap of 5 years or fewer among intimate partner was associated with greater likelihood of violence. On the other hand, women whose ages are closer to that of their intimate partners, are likely to challenge the male dominance and less likely to entertain violence. In addition, a wider age gap between intimates partner is known to affect the autonomy, power, and status of women, rendering women to condone the violent behaviours (Pandey et al., 2009). These notwithstanding, Pandey et al. (2009), concludes that the association between age gap and domestic violence is not fully understood and further studies need to be carried out.

Volpe et al. (2013) carried out a study to determine how age gap between partners predicts power in the relationship, condom use among the adolescent girls, and IPV. They estimated the direct effect of partner age difference on consistent use of condom and indirect effect of factors such as physical intimate partner violence, power within the relationship, and severity of psychological intimate partner violence. The findings from this study show that a greater age difference was associated with inconsistent condom use in a sample of low-income, urban adolescent girls (Volpe et al., 2013). Moreover, violence or fear of negative reaction from an older partner may trigger inconsistent use of condoms.

Finally, a qualitative study carried out by Beauclair and Delva (2013) in South Africa to examine perceived risks of age-disparate relationships among women in Cape Town indicated that women are less likely to be in an intimate relationship with men of the same age or younger than them, because they are viewed as being abusive and disrespectful. Therefore, it remains uncertain whether these women's concerns about IPV are something to go by. Especially, because it contradicts several findings, which show that older male partners are likely to be violent towards their intimate partners. Consequently, this paper aims to report the association between intimate partner violence and age gap from an analysis of DHS dataset on domestic violence.

3. Methodology

The relationship between intimate partner violence and age gap is not clear despite the numerous studies carried out to establish the association between them as discussed in chapter 2. This project aims to use the Demographic and Health Surveys (DHS) dataset collected from different countries on domestic violence to bring more light into the association between age gap and IPV. This project is distinct because it uses new dataset, which will give the world new information regarding the association between IPV and age gap.

Therefore, this chapter aims to give the research sampling as applied by DHS, methods of data collection used by DHS, methods of data analysis, and ethical considerations.

3.1 Sampling

Demographic and Health Surveys aim to collect information from the whole population or nationally representative samples of households in each DHS country. In order to achieve best quality, comparability, and consistency in all the countries, Measure DHS is guided by some principles as stated below ([Sampling Manual](#)):

- the use of existing sampling frames such as population census in previous years.
- full coverage of the target population such as all women aged 15–49 and children under the age of five.
- probability sampling where the units are randomly selected with no zero probability or known probability.
- using a satisfactory size of the sample
- ensuring that the confidentiality of participants are maintained

The domestic violence (DV) module was administered in a sub-sample of women selected from the households. The sub-samples comprised of one woman randomly selected from each household. This scheme was intended to maintain confidentiality, and ensure security of the interviewer and the women being interviewed ([Kishor and Johnson, 2004](#)). The interviewers in all the countries included in this report were required to stop the interview if privacy was not guaranteed. All the countries included in this report interviewed women only on domestic violence as provided by the DHS phase 6 questionnaire. Finally, not all women interviewed were eligible to answer questions on spousal violence. The eligible women were those who were currently married or formerly married.

3.2 Methods of Data Collection

The DHS surveys uses three core questionnaires: the women's questionnaire, household questionnaire, and the men's questionnaire. The household questionnaire is used to collect information on the number of individuals per household, visitors, the characteristic of people in the household, assets, and even amenities. The women's questionnaire is used to gather information on matters affecting women such as family planning and domestic violence ([DHS](#)).

The Demographic and Health Surveys (DHS) Initiated the collection of information on IPV in 1990. The first country where the DHS collected information on IPV was in Colombia. Given the rise in IPV cases world wide, DHS developed a standard module for collection of information on IPV in 2000, they called it the domestic violence (DV) module (Hindin et al., 2008). The DV module ensured that the data collected from different countries were valid and comparable.

3.3 Source of Data and Countries under Study

The data used in this analysis was obtained from the Measure DHS website after applying for the permission from the DHS official. To get access to the datasets an abstract was written describing the purpose of the study and the methods of data analysis. Table 3.1 gives the information pertaining the countries included in this report and the number of women who received the domestic violence (DV) module. The women who received the DV module were aged 15–49 years old. The analysis in this report is based on the information that was collected from these women on IPV (Data).

Country Name	Never in Union	Currently in Union	Formerly in Union
Burkina Faso	1354	9648	361
Honduras	3339	10419	2075
Jordan	0	6706	321
Kyrgyz Republic	1190	4361	471
Nepal	692	3373	132
Zimbabwe	1260	4413	869
Tanzania	1358	4934	755

Table 3.1: Category and Number of Women who received the DV module

3.4 Description of the Data

All the countries considered in this report used DHS questionnaire for phase 6 to collect data on domestic violence. In almost all the countries considered in this paper, the following were considered as acts of physical violence: less severe violence, severe violence and sexual violence. Less severe violence was measured from the following occurrences: pushing, shaking or throwing something harmful at the respondent, slapping the respondent, punching the respondents with fist or something harmful, twisting the arm or pulling the hair of the respondent. Severe violence was gauged using indicators such as kicking or dragging the respondent, burning or strangling the respondent, threatening or attacking with a knife or a gun or other harmful weapons. Sexual violence was measured using the acts such as physically forcing sex against the will of the respondents and other sexual acts when not wanted were categorized as sexual violence. Moreover, humiliation, threatening, and insulting the respondent was considered as emotional acts of violence (DV Module).

The respondents were asked if they have ever experienced any indicator of IPV and their response was either no or yes. If the response was yes, they were to state the frequency in the last 12 months prior to the survey. The frequencies were: often, sometimes, not at all or yes but not in the last 12 months. There were also cases where the respondents had experienced IPV but could not tell the frequency in the last 12 months preceding the survey.

3.5 Methods of Data Analysis

Two sets of analysis were carried out to determine the prevalence of IPV in these countries. The first set was descriptive statistics, which are summarized in tables as shown in chapter 4. Another set of analysis was the use of modified poisson regression to determine the association that exists between IPV and age gap.

The unit of analysis is the woman. The response or outcome is whether the woman experienced any measure of IPV. Therefore, we are supposed to model a binary outcome, which consist of yes and no responses. The exposure in this analysis is the age gap. The effect of such an exposure on such an outcome has been expressed in the form of odds ratio. However, odds ratio is often misinterpreted as relative risk (Nurminen, 1995). Consequently, arguments have been made in favour of relative risk(RR) rather than the odds ratio (Nurminen, 1995).

Relative risk is the ratio of the probability of an event occurring in an exposed group to the probability of an event occurring in an unexposed group. For example, suppose we say that being exposed to IPV involves a woman having an intimate partner who is either older or younger than her and having a partner of the same age is being non-exposed. Let us assume that the probability of experiencing IPV among the exposed group is 30% and among the unexposed group is 2%. Then considering table 3.2, $a = 30\%$, $b = 70\%$, $c = 2\%$, and $d = 98\%$. The relative risk of IPV associated with age gap is given by

$$RR = \frac{\frac{a}{a+b}}{\frac{c}{c+d}} = \frac{\frac{30}{100}}{\frac{2}{100}} = 15. \quad (3.5.1)$$

We then deduce that the exposed group is fifteen times more likely to experience IPV.

Relative risk can be estimated using log binomial regression. This model is flexible and accommodates both categorical and continuous predictors. However, it may fail to converge. To overcome convergence problem, researchers have suggested a modified regression approach (Zou, 2004). The description of how modified poisson regression works is as follows.

3.5.1 Modified Poisson Regression. Traditionally, poisson regression is used to model count data and binary data. However, when used to model binary data, the error for the estimated relative risk is overestimated. This problem is rectified by using a robust error variance procedure known as sandwich estimation, leading to a method called modified poisson regression (Zou, 2004). The model can be written as:

$$\log(\pi_i) = \beta_0 + \beta_1 X_{1_i} + \cdots + \beta_k X_{k_i}, \quad (3.5.2)$$

where by π_i is the probability of experiencing the outcome of interest for a subject i , β_0, \cdots, β_k are parameters, and X_{1_i}, \cdots, X_{k_i} are predictor variables.

Consider a case in which $x_i (i = 1, 2, \cdots, n)$ is a binary exposure with a value of 1 if exposed and a value of 0 if unexposed. Then, the data can be summarized in a 2-by-2 table as shown in table 3.2.

Entries in a 2-by-2 table			
	y=1(event)	y=0(no event)	Total
x=1 (exposed)	a	b	$n_1=a+b$
x=0 (unexposed)	c	d	$n_0=c+d$
			$n=n_0+n_1$

Table 3.2: Table showing occurrence of an event given an exposure

Suppose that subject i has an underlying risk that is a function of x_i , say $\lambda(x_i)$. Because $\lambda(x_i) \geq 0$, the logarithm link function is the choice for modelling $\lambda(x_i)$, resulting into (Zou, 2004)

$$\log[\lambda(x_i)] = \beta_0 + \beta_1 x_i. \quad (3.5.3)$$

The relative risk is given as $\exp(\beta_1)$. If the Poisson distribution is assumed for y_i , the log-likelihood is given by

$$l(\beta_0, \beta_1) = C \sum_{i=1}^n [y_i(\beta_0 + \beta_1 x_i) - \exp(\beta_0 + \beta_1 x_i)], \quad (3.5.4)$$

where C is a constant. Application of the likelihood theory results in

$$\exp(\hat{\beta}_0) = \frac{c}{n_0}, \quad (3.5.5)$$

$$R\hat{R} = \exp(\hat{\beta}_1) = \frac{an_0}{cn_1}, \quad (3.5.6)$$

with the estimated variance of $R\hat{R}$ given by

$$\hat{\text{Var}}(R\hat{R}) = \frac{1}{a} + \frac{1}{c}. \quad (3.5.7)$$

Since the error term is overestimated when the underlying data are binomially distributed, the sandwich estimator is used to make the appropriate correction (Zou, 2004). The corrected variance can be easily shown to be given by

$$\text{Var}(R\hat{R}) = \frac{1}{a^2} \sum_{i=1}^{n_1} [y_i - \exp(\beta_0 + \beta_1)]^2 + \frac{1}{c^2} \sum_{i=1}^{n_0} [y_i - \exp(\beta_0)]^2, \quad (3.5.8)$$

which is estimated to be

$$\hat{\text{Var}}(R\hat{R}) = \frac{1}{a} - \frac{1}{n_1} + \frac{1}{c} - \frac{1}{n_0}. \quad (3.5.9)$$

In R , the poisson regression is fitted using the glm command with poisson as the family and logarithm as the link function. However to get the robust estimates using sandwich estimators, sandwich and lmtest libraries must be added followed by the command `coefest(glm output,vcov=sandwich)`.

3.6 Ethical Considerations

The information collected in a DHS survey is very sensitive and personal in nature, for instance IPV or the sexual behaviour of an individual. As a result DHS has a standard procedure that meet international requirement of informed consent and privacy of information (Kishor and Johnson, 2004). Some of the measures taken into consideration to maintain privacy include no disclosure of the names of the respondents in any data set. Moreover, DHS follows safety and ethical procedures and guidelines in accordance to the World Health Organization ethical and recommendation for research on domestic violence. The safety and ethical standards include (Kishor and Johnson, 2004):

- The interviewer should continue with the interview only if the privacy of the respondent is guaranteed.
- Informing the woman what the sets of questions to be asked entails at the start of the interview and assuring her that the answers she going to give are completely confidential and no one will be informed of her response.
- Supervisors and interviewers are trained to sensitize them to the problem of IPV and the challenges they are likely to encounter when collecting information on the subject.
- Men who are interviewed are not asked questions based on domestic violence.
- Only one woman per household should receive the DV module.

4. Data Analysis

This chapter gives the prevalence of intimate partner violence in the form of tables and the results of the association that exists between IPV and age gap. The prevalence of various types of IPV and their specific measures are given in the form of tables. The types of IPV are: emotional violence and physical violence. The results from the specific measures of violence are recorded with responses such as often, sometimes, not at all, and frequency missing.

4.1 Prevalence of Emotional Violence

Table 4.1 shows the percentage of women who have experienced emotional violence, while tables 4.2, 4.3 and 4.4 show the prevalence of the specific indicators of emotional violence. It is lucid from table 4.1 that Tanzania reported the highest percentage of 31% of women who experienced emotional violence. Women in Burkina Faso reported the least percentage of 9.8%.

Country Name	No	Yes
Burkina Faso	90.2	9.8
Honduras	70.2	29.8
Jordan	77.8	22.2
Kyrgyz Republic	87.7	12.3
Nepal	82.5	17.5
Zimbabwe	74.7	25.3
Tanzania	68.7	31.3

Table 4.1: Emotional Violence

Considering specific indicators of emotional violence, we see that Tanzania recorded a higher percentage of 4.2% of women who were often humiliated 12 months preceding the survey, while the least was recorded in Burkina Faso with 1.3%. For those who were sometimes humiliated, a bigger percentage of 7.0% was observed in Tanzania and the smallest scenario was recorded in Nepal with 4.0% as shown in table 4.2.

Country Name	No	Often	Sometimes	Not at all	Frequency missing
Burkina Faso	92.4	1.3	4.5	1.4	0.5
Honduras	84.9	2.5	6.9	5.6	0.1
Jordan	85.4	3.7	6.5	4.4	0.0
Kyrgyz Republic	90.3	2.4	4.6	2.7	0.0
Nepal	90.8	1.6	4.0	3.6	0.0
Zimbabwe	89.9	2.5	6.1	1.5	0.0
Tanzania	86.8	4.2	7.0	1.7	0.3

Table 4.2: Ever Been Humiliated

Moreover, table 4.3 shows the percentage of women who were ever threatened with harm by their spouses. It is clear that the highest percentage of 2.3% was recorded for Tanzania and Zimbabwe for women who were often threatened by harm. The least percentage of 0.9% was recorded for Burkina Faso.

Zimbabwe showed prominence with percentage of 5.3% of those who were sometimes threatened with harm, while the smallest percentage was reported in Kyrgyz Republic with 1.3%. Honduras reported a higher percentage of 3.6% of women who were threatened with harm but not in the last 12 months prior to the survey, however, the least percentage of 1.2% was reported in Tanzania and Kyrgyz Republic.

Country Name	No	Often	Sometimes	Not at all	Frequency missing
Burkina Faso	93.5	0.9	3.8	1.4	0.4
Honduras	90.9	1.4	4.0	3.6	0.1
Jordan	94.8	1.3	2.2	1.8	0.0
Kyrgyz Republic	96.8	0.7	1.3	1.2	0.0
Nepal	94.8	0.8	2.4	2.0	0
Zimbabwe	91.1	2.3	5.3	1.3	0.0
Tanzania	92.2	2.3	4.1	1.2	0.3

Table 4.3: Spouse ever threatened with harm

Table 4.4 shows the percentage of women who were insulted or made to feel bad by their spouses. Tanzania dominated with a percentage of 9.1% of women who were often insulted or made to feel bad. On the other hand, 15.7% of women in Tanzania experienced an insult sometimes in the last 12 months to the survey, with the least percentage of 4.5% observed in Burkina Faso. For women who were insulted and made to feel bad but did not report a similar occurrence 12 months prior to the survey, the highest percentage of 8.8% was reported in Honduras and the least in Burkina Faso with 1.4%.

Country Name	No	Often	Sometimes	Not at all	Frequency missing
Burkina Faso	92.4	1.3	4.5	1.4	0.4
Honduras	73	4.3	13.7	8.8	0.2
Jordan	81.9	4.4	9.0	4.7	0.0
Kyrgyz Republic	90.3	2.4	4.6	2.7	0.0
Nepal	85.3	2.0	7.4	5.3	0.0
Zimbabwe	79.6	4.0	13.8	2.6	0.0
Tanzania	71.7	9.1	15.7	3.2	0.9

Table 4.4: Spouse ever insulted or made the woman to feel bad

4.2 Prevalence of Physical Violence

Prevalence of physical violence was gauged through the following categories: women ever experienced less severe violence, ever experienced severe violence and ever experienced sexual violence. These three categories had different measures as will be reported in the successive sections.

4.2.1 Ever experienced less severe violence. Table 4.5 shows the summary of women who have experienced less severe physical violence. Tanzania shows the biggest percentage of 33.8%, while Burkina Faso has the least value of 11.2%.

Country Name	No	Yes
Burkina Faso	88.8	11.2
Honduras	81.7	18.3
Jordan	80.6	19.4
Kyrgyz Republic	73.6	26.4
Nepal	76.9	23.1
Zimbabwe	72.4	27.6
Tanzania	66.2	33.8

Table 4.5: Less severe violence

The Tables 4.6, 4.7, 4.8 and 4.9 show the prevalence of specific indicators of less severe physical violence. Starting with Table 4.6, Kyrgyz Republic indicated that 3.9% were often pushed, shook or had something thrown at them. Interestingly, Kyrgyz Republic reported the greatest percentage again of 11.9% of those who were sometimes pushed, with a smaller percentage of 2.7% observed in Burkina Faso. For the category that was pushed or shook but not in the last 12 months before the survey, Honduras indicated the biggest percentage of 7.8%, and Burkina Faso the smallest percentage of 0.7%.

Country Name	No	Often	Sometimes	Not at all	Frequency missing
Burkina Faso	95.8	0.5	2.7	0.7	0.3
Honduras	84.4	1.6	6.2	7.8	0.0
Jordan	86.0	2.2	6.0	5.8	0.0
Kyrgyz Republic	78.1	3.9	11.9	6.2	0.1
Nepal	84.5	1.7	6.2	7.6	0.0
Zimbabwe	90.5	2.0	5.6	1.9	0.0
Tanzania	85.4	3.7	8.4	2.3	0.2

Table 4.6: Spouse ever pushed, shook, or threw something

Table 4.7 summarizes the percentage of women who were ever slapped by their spouses. Tanzania recorded the highest value of 7.3% of women who were often slapped. The table also shows that Tanzania has the highest proportion of their female population that has been sometimes slapped. Nepal reported the highest percentage of their female population who were not slapped, while Burkina Faso has the least proportion of 1.5%. In addition, 0.4% of Tanzania women population could not report the frequency at which they were slapped 12 months preceding the survey.

Country Name	No	Often	Sometimes	Not at all	Frequency missing
Burkina Faso	91.3	0.8	6.1	1.5	0.4
Honduras	90.9	1.0	3.2	4.8	0.1
Jordan	85.7	1.9	4.7	7.7	0.0
Kyrgyz Republic	80.8	2.4	9.7	7.0	0.1
Nepal	79.3	1.4	7.9	11.4	0.0
Zimbabwe	76.2	2.8	13.7	7.3	0.0
Tanzania	69.0	7.3	18.4	4.9	0.4

Table 4.7: Spouse ever slapped her

Cases of the spouse punching the woman with a fist or something harmful was also reported in all the countries considered in this report as shown in table 4.8. Tanzania recorded a dominant value of 4.4% of their female population that was often punched. Nepal and Kyrgyz Republic recorded a similar value of 1.7%. However, Tanzania still dominated with a percentage of 8.8% of their women population that was sometimes punched. Nepal and Honduras reported a similar value of 3.3% of their female population that was sometimes punched as shown in 4.8.

Country Name	No	Often	Sometimes	Not at all	Frequency missing
Burkina Faso	94.2	0.6	3.9	1.0	0.3
Honduras	91.7	1.1	3.0	4.3	0.0
Jordan	92.1	1.4	3.3	3.2	0.0
Kyrgyz Republic	89.5	1.7	4.9	3.9	0.0
Nepal	91.4	0.9	3.3	4.5	0.0
Zimbabwe	90.6	1.7	5.0	2.7	0.0
Tanzania	84.5	4.4	8.8	2.1	0.2

Table 4.8: Spouse ever punched with fist or something harmful

The last indicator of less severe violence is whether the woman's arm was twisted or her hair pulled by her intimate partner, which is reported in table 4.9. The biggest proportion of 1.6% of the Tanzanian female population had their arms twisted often. A similar percentage of 3.2% was recorded in Honduras and Jordan of the women population whose arms were sometimes twisted. Notably, no data was recorded in Burkina Faso about this indicator of physical violence.

Country Name	No	Often	Sometimes	Not at all	Frequency missing
Burkina Faso	-	-	-	-	-
Honduras	92.1	1.0	3.2	3.7	0.0
Jordan	92.0	1.3	3.2	3.5	0.0
Kyrgyz Republic	92.4	1.2	3.5	2.9	0.0
Nepal	90.1	1.1	3.8	5.0	0.0
Zimbabwe	95.6	0.5	1.5	0.3	2.1
Tanzania	94.5	1.6	2.9	0.8	0.2

Table 4.9: Spouse ever twisted her arm or pulled her hair

4.2.2 Ever experienced severe violence. Table 4.10 gives the summary of those who ever experience severe violence. The Tanzanian women population recorded the biggest proportion of 12.7%, while the least proportion of 0.8% was noted in Burkina Faso. The rest of the tables 4.11, 4.12, and 4.13 in this subsection indicate the measures of severe violence.

Country Name	No	Yes
Burkina Faso	99.2	0.8
Honduras	93.1	6.9
Jordan	94.9	5.1
Kyrgyz Republic	94.5	5.5
Nepal	88.8	11.2
Zimbabwe	91.0	9.0
Tanzania	87.3	12.7

Table 4.10: severe violence

Considering table 4.11, it is clear that more women in Tanzania were often kicked or dragged by their spouses compared to any other country. Tanzania still recorded the biggest value of 6.0% of their women population that were sometimes kicked or dragged. Women in Nepal reported not being kicked or dragged at all 12 months preceding the survey with a proportion of 5.5%.

Country Name	No	Often	Sometimes	Not at all	Frequency missing
Burkina Faso	98.0	0.3	1.2	0.3	0.2
Honduras	96.2	0.6	1.2	2.1	0.0
Jordan	95.2	1.0	1.9	1.9	0.0
Kyrgyz Republic	94.9	0.8	2.0	2.3	0.0
Nepal	89.5	1.2	3.8	5.5	0.0
Zimbabwe	92.1	1.4	4.2	2.3	0.0
Tanzania	88.8	3.3	6.0	1.7	0.2

Table 4.11: Spouse ever Kicked or dragged

Scenarios where the spouse ever tried to strangle or burn the woman were also reported as shown in table 4.12. Zimbabwe, Honduras and Jordan recorded the same value of 0.3% of women whose spouse often tried to strangle or burn them. Women in Tanzania were not lucky because they reported the biggest percentage of 1.5% where the intimate partner sometimes tried to strangle her. Finally, the biggest proportion of 1.6% was recorded in Nepal of the women population whose spouses did not try to strangle or burn them last 12 months to the survey.

Country Name	No	Often	Sometimes	Not at all	Frequency missing
Burkina Faso	99.5	0.1	0.3	0.0	0.1
Honduras	97.7	0.3	0.8	1.2	0.0
Jordan	98.6	0.3	0.4	0.7	0.0
Kyrgyz Republic	98.8	0.1	0.5	0.6	0.0
Nepal	97.0	0.4	1.0	1.6	0.0
Zimbabwe	98.6	0.3	0.9	0.2	0.0
Tanzania	97.4	0.7	1.5	0.4	0.1

Table 4.12: Spouse ever tried to strangle or burn her

Another measure of severe violence as shown in table 4.13 indicate that 0.4% of women in Honduras and Zimbabwe were often threatened with a knife/gun or other weapons. The smallest proportion was recorded from Burkina Faso's women population, while Jordan and Kyrgyz Republic recorded a similar

value of 0.1%. For the women population who recorded having been sometimes threatened with a knife, the highest percentage of 1.5% was noted in Honduras, while the least value of 0.2% was recorded in Burkina Faso and Jordan. Tanzania recorded no data for women who were ever threatened with a knife or other weapons by their partners.

Country Name	No	Often	Sometimes	Not at all	Frequency missing
Burkina Faso	99.6	0.0	0.2	0.1	0.1
Honduras	96.0	0.4	1.5	2.1	0.0
Jordan	99.2	0.1	0.2	0.5	0.0
Kyrgyz Republic	99.0	0.1	0.3	0.6	0.0
Nepal	98.0	0.2	0.9	0.9	0.0
Zimbabwe	98.1	0.4	1.0	0.5	0.0
Tanzania	-	-	-	-	-

Table 4.13: Spouse ever threatened with knife/gun or other weapon

4.2.3 Ever experienced sexual violence. Table 4.14 shows the percentage of women who have experienced sexual violence. The table shows that 100% of women in Jordan suffered from sexual violence. This is because the data for this type of violence was incomplete. Considering the complete data, women in Nepal and Zimbabwe suffered from sexual violence more than the other countries with a proportion of 14.7% as shown in table 4.14. Tables 4.15 and 4.16 displays the results for specific measures of sexual violence.

Country Name	No	Yes
Burkina Faso	98.5	1.5
Honduras	93.9	6.1
Jordan		100
Kyrgyz Republic	95.8	4.2
Nepal	85.3	14.7
Zimbabwe	85.3	14.7
Tanzania	87.1	12.9

Table 4.14: sexual violence

Considering specific measures of sexual violence, we see from table 4.15 that Tanzania recorded the highest percentage of 3.9% of women who were often forced to have sex against their will. Zimbabwe dominated with 7.6% of women who were sometimes forced into sex, while Burkina still recorded the least percentage of 0.9%. Nepal, on the other hand, recorded the highest percentage of 5.6% of women who were forced into sex but not in the last 12 months prior to the survey.

Country Name	No	Often	Sometimes	Not at all	Frequency missing
Burkina Faso	98.6	0.2	0.9	0.1	0.1
Honduras	94.3	0.9	2.0	2.7	0.0
Jordan	92.0	1.5	4.1	2.4	0.0
Kyrgyz Republic	96.1	0.8	2.1	1.0	0.0
Nepal	85.7	1.5	7.1	5.6	0.0
Zimbabwe	87.5	2.9	7.6	2.0	0.0
Tanzania	87.8	3.9	7.0	1.1	0.2

Table 4.15: Spouse ever physically forced sex when not wanted

Table 4.16 shows the percentage of women who were forced into other sexual act when not wanted. It is clear from the table that women from Zimbabwe suffered the most with a value 1.9% among women who were often forced into other sexual acts. Zimbabwe still recorded the biggest percentage of 5.2% of those who were sometimes forced into other sexual acts. On the other hand, Nepal and Honduras recorded the highest proportion of 1.5% of those who were forced into other sexual acts, but not in the last 12 months to the survey. No data was recorded in Jordan for this measure of sexual violence.

Country Name	No	Often	Sometimes	Not at all	Frequency missing
Burkina Faso	99.8	0.0	0.1	0.0	0.1
Honduras	96.9	0.6	1.0	1.5	0.0
Jordan	-	-	-	-	-
Kyrgyz Republic	99.3	0.1	0.3	0.3	0.0
Nepal	96.3	0.6	1.6	1.5	0.0
Zimbabwe	91.7	1.9	5.2	1.2	0.0
Tanzania	93.4	1.8	3.8	0.8	0.3

Table 4.16: Spouse ever forced other sexual acts when not wanted

4.3 Results of the Association between Age Gap and IPV

The age gap between intimate partners was categorized into different groups. The reference category used was women whose age gap was between 2.5 years younger and 2.5 years older $(-2.5, 2.5]$. The women in this reference group were considered to be in a relationship with a partner whose age is closer to theirs. The relative risks (RR) from the modified poisson model was then plotted against the mid-points of the age gap categories. Moreover, error bars were plotted for each estimated relative risk where by the upper cap is the upper 95% confidence limit and the lower cap is the lower 95% confidence limit. The horizontal line drawn at $RR=1.00$ is the risk ratio of the reference group against which the estimated relative risks are compared.

Finally, in some plots the upper confidence limits extended to infinity. In this case the upper error bar was truncated to values that can be accommodated on a coordinate system. The values were extending to infinity because their were few women in the age gap categories.

4.3.1 Emotional Violence. The risk of experiencing emotional violence decreases in Burkina Faso, Tanzania, and Kyrgyz Republic when the woman is older than the man compared to when the woman

has a closer age to her intimate partner as shown in figures 4.1a, 4.1e, and 4.1d respectively. A similar scenario is observed in Honduras, but slightly increases when the age gap of the spouses is in the (-7.5,-2.5] and (-12.5,-7.5] categories. Moreover, the risk ratio is significantly lower in Burkina Faso when the man is between 17.5 years and 22.5 years older than the woman. In addition, the risk of experiencing emotional IPV in Tanzania is significantly lower than 1.00 when the man is between 12.5 years and 17.5 years older than the partner. However, the risk is significantly higher than 1.00 in Nepal when the spouse age gap is in the category (17.5,22.5] as indicated in figure 4.5a.

In Jordan, Honduras, Tanzania, Kyrgyz Republic and Zimbabwe, the risk of a woman experiencing emotional violence is the same when the woman is in a relationship with a man who has a closer age to hers and when the age gap of the spouses fall in the (2.5,7.5], (7.5,12.5], and (12.5,17.5] categories as shown in figures 4.1c, 4.1b, 4.1e, 4.1d and 4.1f. Furthermore, the risk ratio increases in Nepal when the woman is older than the man in comparison to when the woman was to have a partner with a closer age to hers.

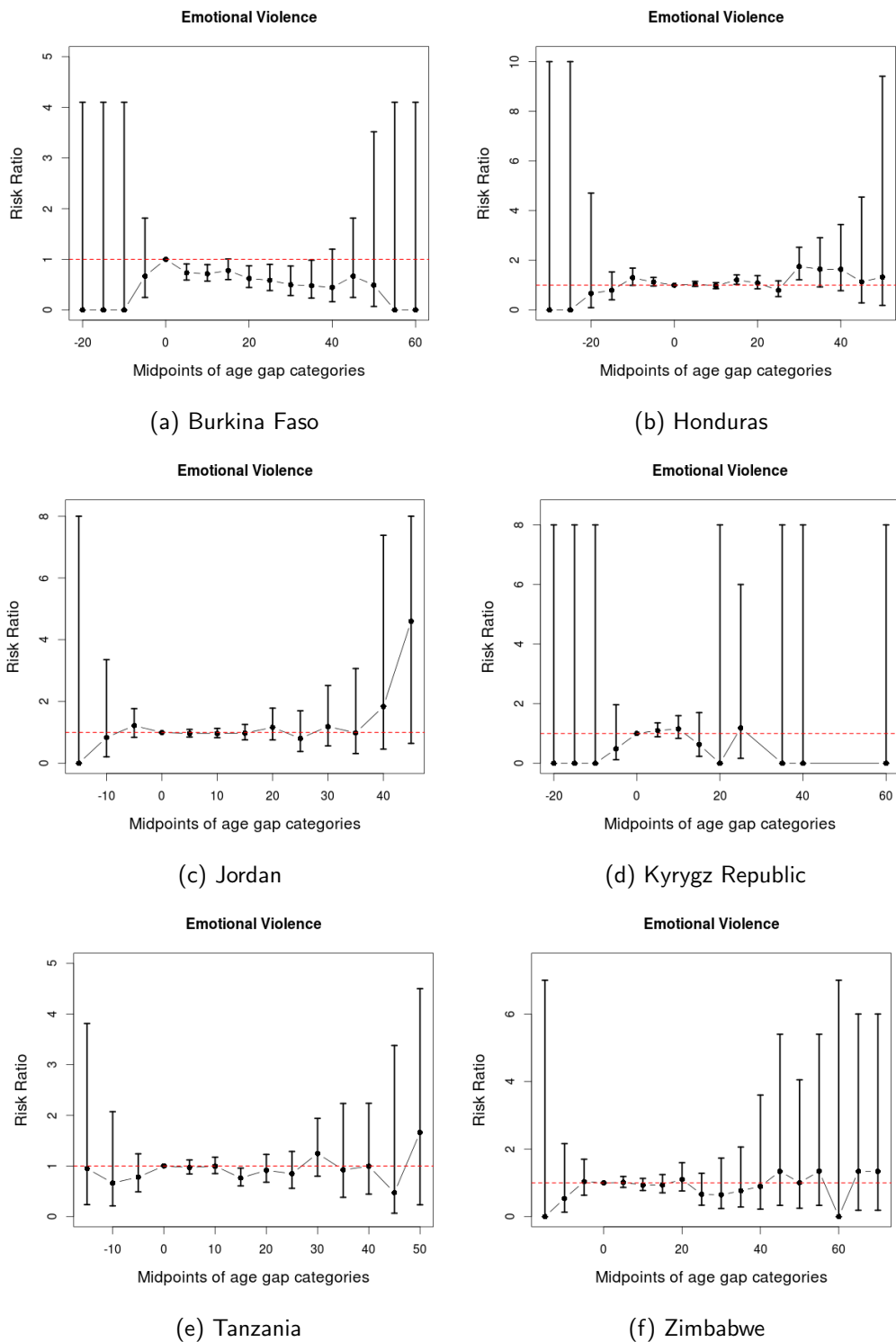


Figure 4.1: Estimated risks in dots of experiencing emotional violence and their 95% confidence interval

4.3.2 Less Severe Violence. The risk of a woman experiencing less severe violence in Tanzania and Burkina Faso decreases when the woman is older than the man in comparison to when the woman was in a relationship with a man of a close age as shown in figures 4.2c and 4.2a. On the other hand, the risk increases in Nepal and Zimbabwe when the age gap of the intimate partners is in the categories (-12.5,-7.5] and (-7.5,-2.5] as demonstrated in figures 4.5b, 4.2f respectively.

In Burkina Faso, the risk of experiencing less severe violence reduces significantly when the man is older than the woman compared to when the age gap of the spouses is between -2.5 years and 2.5 years. A similar occurrence is observed in Tanzania when the man is between 12.5 years and 17.5 years older than the woman. However, in Jordan and Honduras the risk increase when the woman is between 7.5 years and 12.5 years older than the man as shown in figures 4.2d and 4.2b respectively.

Moreover, women in Jordan, Zimbabwe and Kyrgyz Republic who are in a relationship in which the age gap falls in the categories (2.5,7.5] and (7.5,12.5] is at a similar risk of experiencing less severe violence with a woman in a relationship with a man of a closer age.

4.3.3 Severe Violence. The risk of a woman experiencing severe violence decreases in Tanzania when the woman is older than the man as shown in figure 4.3c respectively. The risk reduces in Burkina Faso when the man is older, but is significantly lower than 1.00 when the man is between 17.5 years and 22.5 years older as indicated in 4.3a. In Zimbabwe and Honduras, the woman is slightly at a lower risk when in a relationship where by the age gap falls in the categories (2.5,7.5] and (7.5,12.5] than when with a partner of a closer age.

In Nepal and Kyrgyz Republic the risk is significantly greater than 1.00 when the man is between 17.5 years and 22.5 years older than the woman as evidenced in figures 4.5c and 4.3e. A similar phenomenon is observed in Honduras when the man is between 27.5 years and 32.5 years older than the partner. Moreover, women in Zimbabwe are at a higher risk of experiencing severe violence when in a relationship where by the age gap is in the (-7.5,-12.5] category.

4.3.4 Sexual Violence. The risk of experiencing sexual violence increases in Nepal, Honduras and Kyrgyz Republic when the woman is between 7.5 years and 12.5 years older than the man compared to when the woman has a partner 2.5 years younger or 2.5 years older as displayed in figures 4.4d, 4.4b and 4.4e. However, the risk ratio reduces in Tanzania and Burkina Faso when the woman is in a relationship in which the age gap is in the categories (2.5,7.5], (7.5,12.5] and (12.5,17.5]. The risk of a woman experiencing sexual violence is significantly greater than 1.00 in Honduras when the age gap is in (2.5,7.5] or (27.5,32.5] categories. In addition, risk of experiencing sexual violence in Nepal is significantly greater than 1.00 when the woman is in a relationship with a man who is between 17.5 years and 22.5 years older than her.

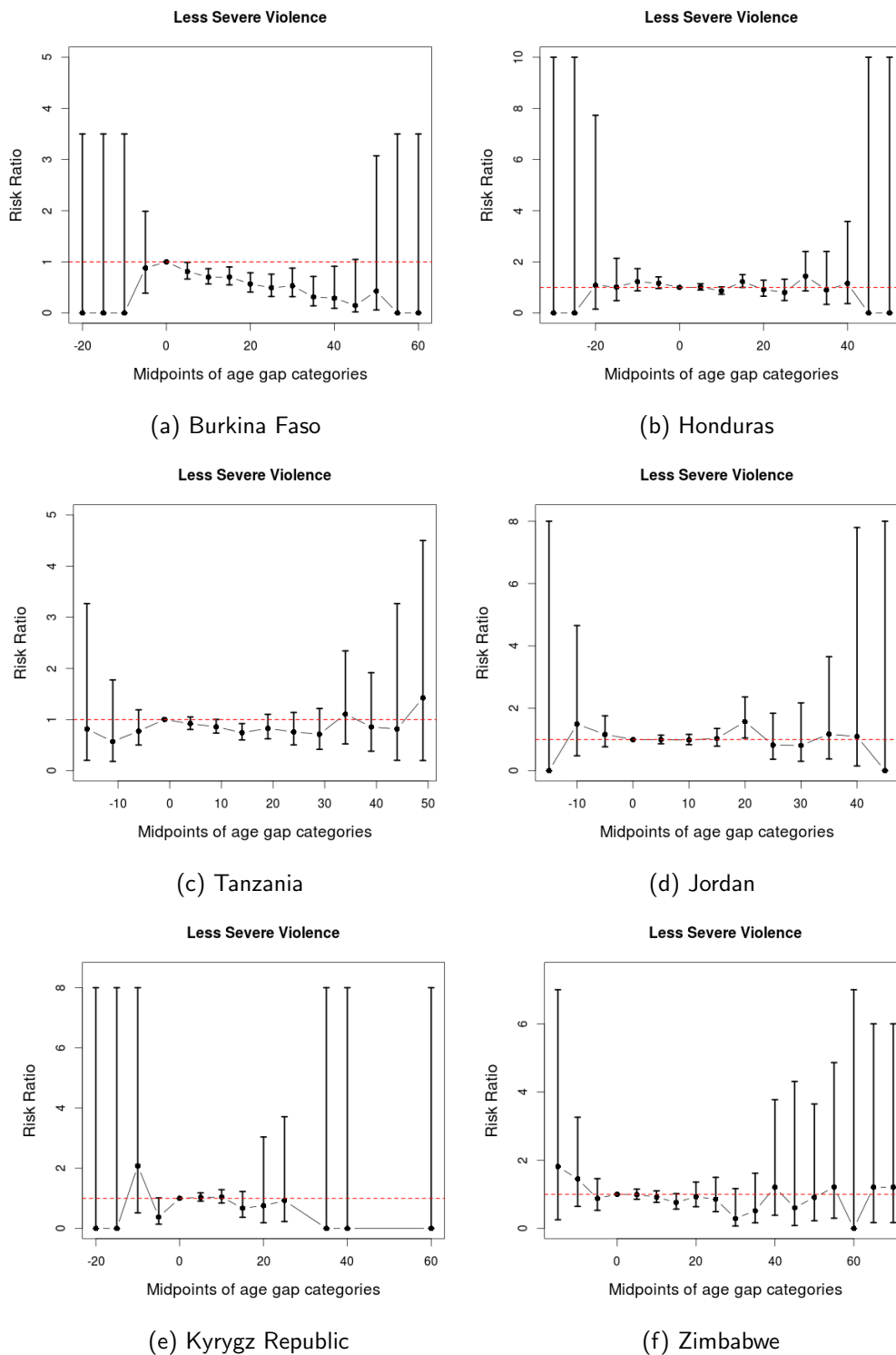


Figure 4.2: Estimated risks of experiencing less severe violence and their confidence intervals.

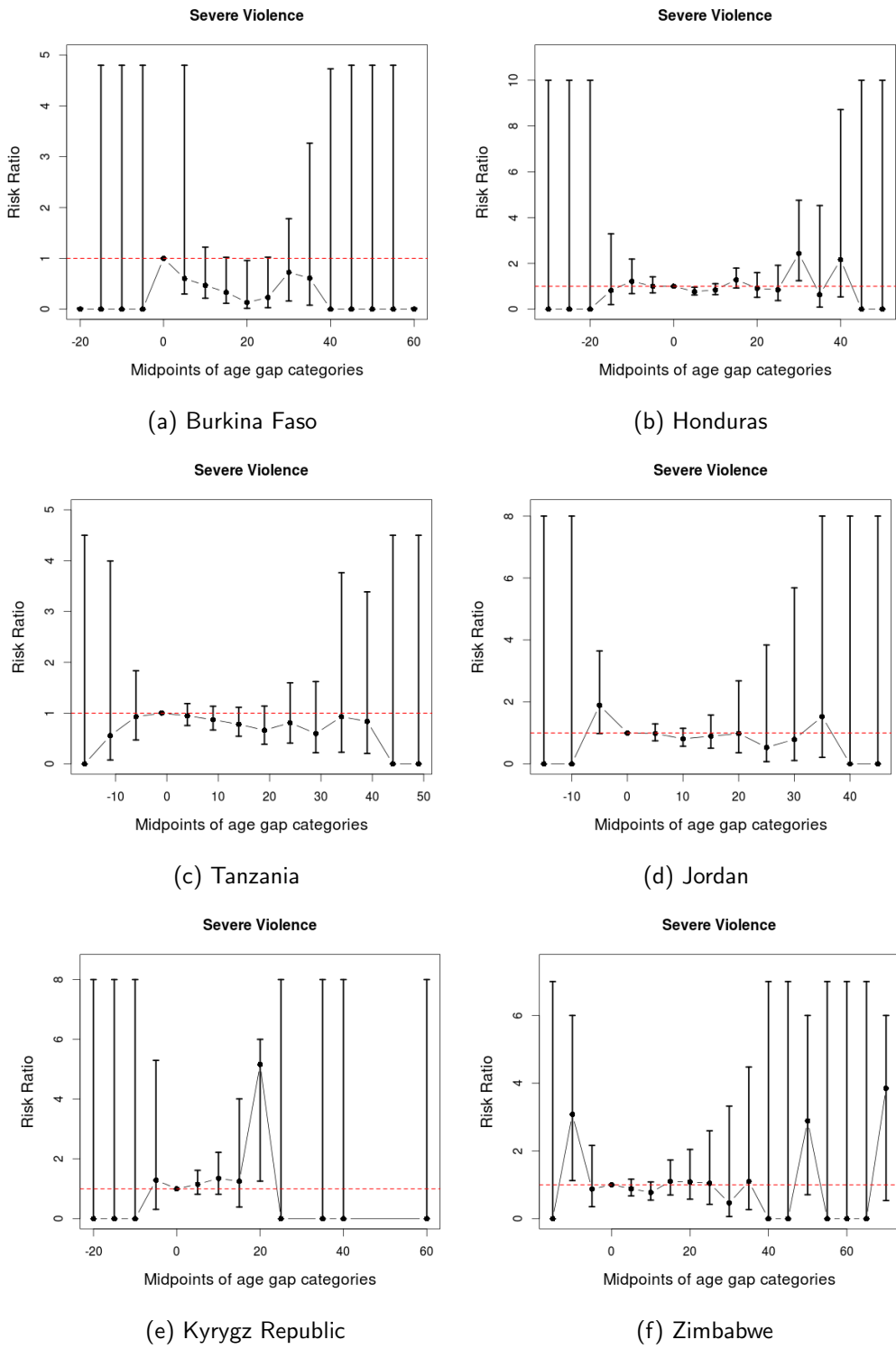


Figure 4.3: Estimated risk of experiencing severe violence and their confidence Interval

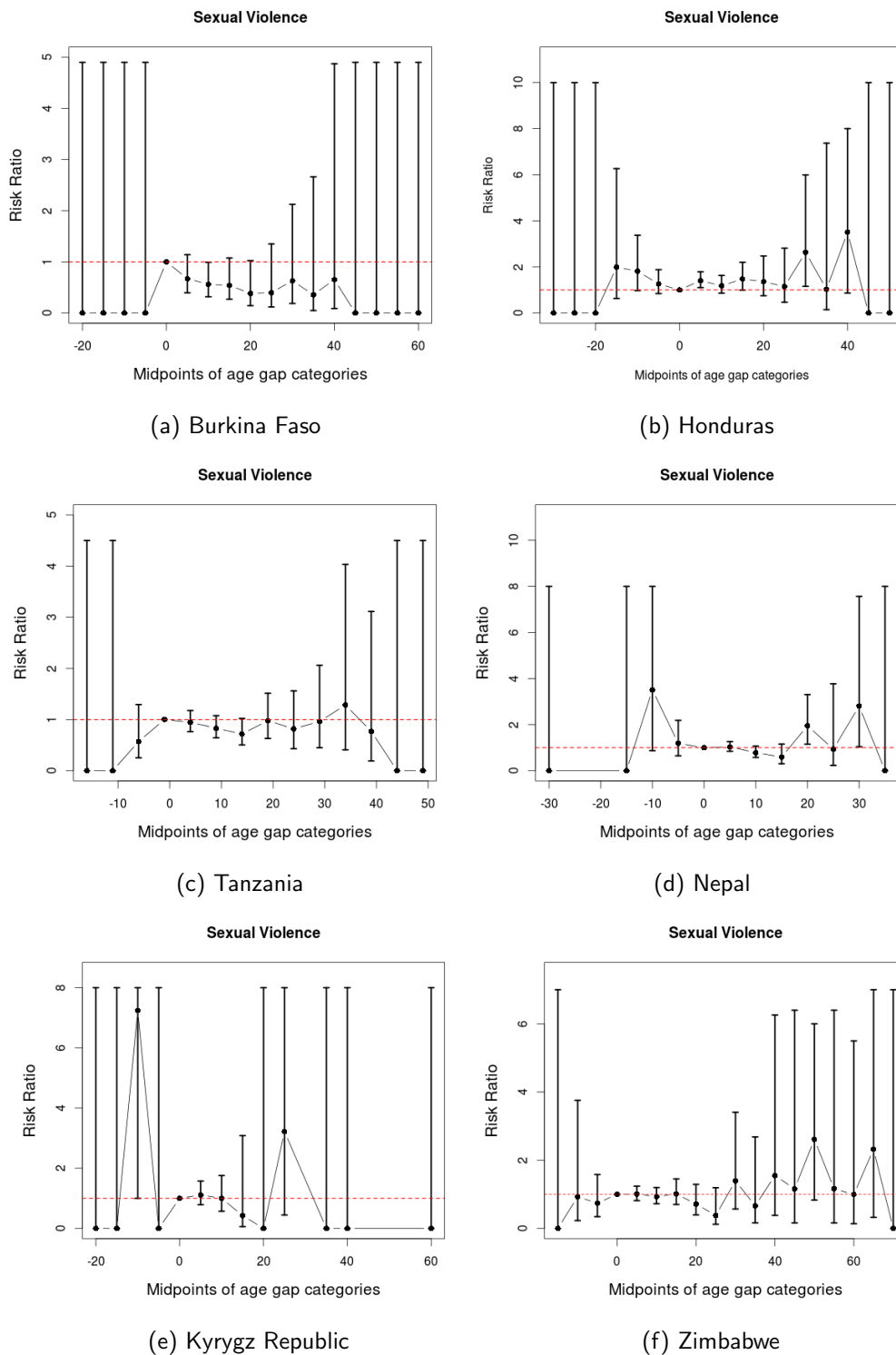


Figure 4.4: Estimated risk of experiencing sexual violence and their 95% confidence Interval

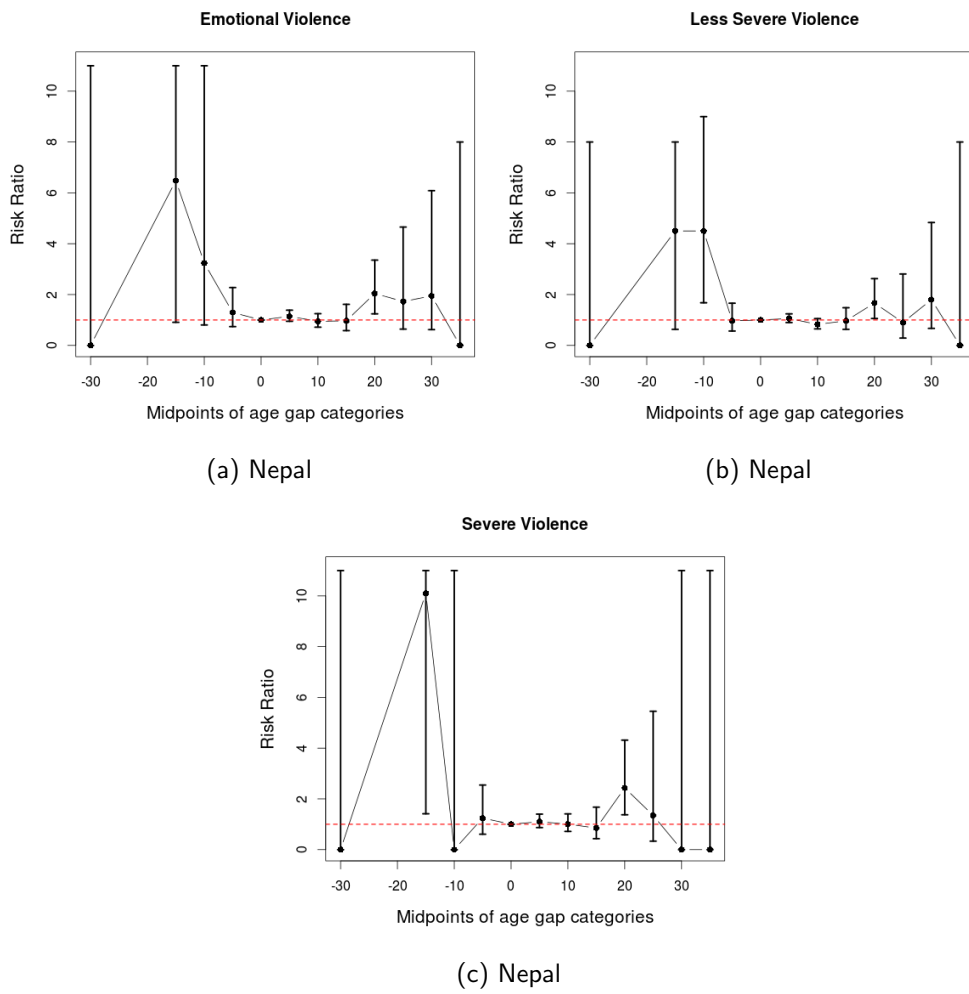


Figure 4.5: Estimated risk of experiencing Emotional, less severe and severe violence in Nepal

5. Discussion and Conclusion

5.1 Discussion

This study presents new results of the association between intimate partner violence (IPV) and age difference between intimate partners. The association was measured in terms of the various types of IPV, which includes emotional violence, less severe violence, severe violence and sexual violence. The data show that there are varying results of the association of IPV and age gap in Tanzania, Burkina Faso, Honduras, Jordan, Nepal, Zimbabwe and Kyrgyz Republic. The study found that the risk of experiencing emotional IPV in Burkina Faso, Tanzania and Kyrgyz Republic was lower when the woman is in a relationship with a younger partner than for women who are closer in age to their partners (women in the age gap category $(-2.5, 2.5]$ were considered as having a closer age to their partners). However, the risk is significantly lower in Tanzania and Burkina Faso when the man is between 12.5 years and 17.5 years older than the woman in comparison to women whose partner's ages are closer to theirs. This contradicts a study carried out by Robbins (1996) in which he found out that a woman is at a lower risk of experiencing IPV when the age of the intimate partner is closer to hers and that the risk increases when the ages begin to diverge.

The risk of encountering emotional IPV increases in Honduras when the woman is in a relationship in which the age gap is in the $(-12.5, -7.5]$ and $(-7.5, -2.5]$ categories compared to when the woman's age is closer to her intimate partner's. Nepal also recorded an increase in the risk of experiencing emotional IPV when the woman is older than the man even though the risk is not significantly different from the reference group, $(-2.5, 2.5]$ with a risk ratio of 1.00. These results from Nepal and Honduras agree with the concern of South African women that being in a relationship with a younger man than them leads to an abusive relationship (Beauclair and Delva, 2013).

Moreover, Tanzanian and Burkina Faso women are at a lower risk of experiencing less severe IPV when the woman is older than her partner, but the risk is not significantly different from 1.00. In Burkina Faso, the risk is significantly lower than 1.00 when the age gap of the spouses is in the categories $(7.5, 12.5]$ – $(37.5, 42.5]$. Tanzania also recorded a significant lower risk when the man is between 12.5 years and 17.5 years older than the female partner. These results supports the views of South African women who believe that having a older partner put them at a lower risk of an abusive relationship (Beauclair and Delva, 2013). However, the risk of experiencing less severe IPV increases in Nepal and Kyrgyz Republic when the woman is between 2.5 years and 12.5 years older than the man. This agrees with the findings of Kishor and Johnson (2004) which showed that women who are in a relationship with a younger partner in Dominican Republic are 27% at risk of experiencing IPV compared to 18% of women who are in a relationship with an older partner.

For severe IPV, the risk reduces in Honduras and Tanzania when the woman is older than the intimate partner in comparison to when the woman has a closer age to her partner's. Severe IPV also reduces in Burkina Faso when the man is older than the woman, but the risk is only significantly different from 1.00 when the man is between 17.5 years and 22.5 years older than the woman. In addition, women in Zimbabwe, and Honduras are at a lower risk of experiencing severe IPV when the woman is between 2.5 years and 12.5 years younger than the intimate partner, however, the risk is not significantly different from 1.00. These results supports the assertion of South African women that having an older partner put them at a lower risk of IPV (Beauclair and Delva, 2013). On the other hand, in Nepal and Kyrgyz Republic the risk of experiencing severe IPV increases and is significantly greater than 1.00 when the man is between 17.5 years and 22.5 years older than the woman.

Finally, the risk of experiencing sexual violence reduces in Tanzania, and Burkina Faso when the woman is in a relationship where by the age gap is in the (2.5,7.5], (7.5,12.5] and (12.5,17.5] categories. This concurs with a study done by [Hindin et al. \(2008\)](#) where by they found that in Zambia, a woman is not at risk of experiencing IPV when the man is at least 5 years older than the female partner. However, this is only applicable to the stated years and therefore, it is not obvious that in these countries dating an older partner puts the woman at a lower risk of an abusive relationship. In addition, an increase in sexual IPV was recorded in Nepal, Honduras, and Kyrgyz Republic when the woman is between 7.5 years and 12.5 years older than the man. The risk of encountering sexual IPV was also significantly greater than 1.00 in Honduras when the man is between 2.5 years and 7.5 years or between 27.5 years and 32.5 years older than the woman. These results from Honduras are analogous to the the findings of [Kelly et al. \(2003\)](#) where by females with partners 10 or more years older than them are at a higher risk of being infected with HIV due to the fear of being abused by their partners.

The results in this study, drawn from a nationally representative sample of women provides a significant advantage over previous studies in this area, because it provides a more generalizable picture of the relationship between intimate partner violence and age gap. The specific measures of intimate partner violence such as humiliation, the woman being threatened by harm, the woman being slapped by the spouse e.t.c, ensured that there was a clear definition of IPV, which guided efficient collection of information. However, some limitations must be recognized. Firstly, collecting data on IPV is a sensitive matter and there is a culture of silence about it. Women fear answering questions on IPV due to fear of shame ([Kishor and Johnson, 2004](#)). Secondly, not all the women who received the domestic violence module (DV) answered questions concerning IPV and this reduced the sample in the analysis. This is because not all the women who received the DV module had been in an intimate relationship before or at the time of the survey. Therefore, they formed the part of the missing data that was not included in the analysis. Finally, in grouping the age gaps, some groups had very few women as small as 1, which lead to very large confidence intervals. This was challenging because no concrete conclusion could be drawn based only on an individual in a group.

5.2 Conclusion

In conclusion, this study found out that there is an association between intimate partner violence and the age difference between intimate partners. However, there is no clear trend in the association in all the countries considered in this analysis. For instance in Burkina Faso, IPV reduces when the ages of intimate partners begin to diverge, while in Nepal, and Kyrgyz Republic less severe IPV increases when the woman is between 2.5 years and 12.5 years older than the spouse. If these findings are anything to go by, then they can be used as part of clinical and community interventions designed to address the problem of IPV such as educating women on potential risks of IPV. Nevertheless, further analysis of DHS datasets from other countries that collected information on domestic violence should be carried out to give more information on the association between IPV and age gap.

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