A QUANTITATIVE ANALYSIS ON INTIMATE PARTNER VIOLENCE IN BANGLADESH

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Abstract

Intimate partner violence (IPV) is one of the complex issue which is difficult to measure despite its prevalence in the society. Obviously, the existence and its correlates vary from culture to culture. This study aims to investigate the situation of IPV in Bangladesh and identify its correlates using Demographic and Health Survey (DHS) 2007. Multinomial logistic regression analysis was used to identify the correlates of IPV. Data analysis suggests that 50.84% of the respondents were exposed to any type of IPV during their lifetime. Multinomial logistic regression analysis reveals that the women having only boy child and also the women having both types of children (boy and girl) had more likelihood of being affected physically than the childless women when compared with no violence. Furthermore, the likelihood of sexual violence was more for the women having both types of children than the childless respondents. Non-Muslim women had more likelihood of being affected by all types of violence than the Muslim women. The rich women had more likelihood of being suffered by sexual violence than the poorest women. The likelihood of infliction by both physical and sexual violence among the poorest women was less than their counterparts when compared with no violence. The women who were the wives of farmers had more likelihood to suffer from sexual violence, and both physical and sexual violence than the women who were the wives of service holders and businessmen. The primary educated women had less likelihood to experience sexual violence than the uneducated women when compared with no violence. The wives of the primary educated partners had more likelihood to be tortured both physically and sexually than the wives of the uneducated partners.

Keywords: Intimate partner violence, multinomial logistic regression, demographic and health survey.

Introduction

Violence within a family is very common in developing world and obviously women and children are the main sufferers. More complex and devastating types of violence are those when these are inflicted to the wives by their husbands (Campbell *et al*., 2002; Watts & Zimmerman, 2002). The prevalence and causes of intimate partner violence (IPV) vary from country to country having differential faces that correlate with socio-economic, demographic and cultural settings of a society.

IPV against women is prevalent in almost all the cultures (Campbell *et al*., 2002; Watts & Zimmerman, 2002) and is associated with considerable mortality and morbidity around the globe (Campbell *et al*., 2002; World Health Organization, 2002). Bangladesh ranks the highest in terms of the rate of IPV in the world. Also, the circumstance and the sex differential of consequences of IPV has been well recognized (Schuler and Islam, 2008). In Bangladesh almost half (49.6%) of the ever-married women were inflicted by physical violence, while 27.3% reported abuse of sexual violence by their husbands (Bangladesh Bureau of Statistics, 2016). The overall situation suggests that Bangladesh is one of the most important country where an in-depth analysis of IPV may be carried out for better policy suggestions for the country as well the developing part of the world (World Bank, 2008; Nazneen *et al*., 2011).This research aims to analyze data related to IPV and identify its correlates prevailing in Bangladesh and hereafter recommend some policy options.

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Materials and Methods

Data: This study was based on the Bangladesh Demographic and Health Survey (BDHS) 2007 (NIPORT *et al.*, 2009) as this was the latest BDHS data set which collected IPV related information. For the study, a sample of 3586 ever married women aged 15-49 years was generated from the survey. Twelve independent variables were chosen to represent the dependent variable IPV e.g., age of the respondents, their division, area of residence, religion, wealth index, marital duration with their last husband, partner's and respondent's occupation, partner's and respondent's education, number of boys and girls they had (sex of child) and the age difference between partners and respondents.

IPV was defined in terms of i) physical and ii) sexual violence experienced by the respondent in her life time. Physical violence was measured with some questions like did the husband of a respondent ever 'push her, shake her, or throw something at her','slap her','twist her arm or pull her hair','punch her with his fist or with something that could hurt her','kick her','drag her or beat her up','try to choke her or burn her on purpose', and'threaten or attack her with a knife, gun, or any other weapon'. Sexual violence was considered by only one question,'did your husband physically force her to have sexual intercourse with him even when she did not want to?'.The women scored 0 if she did not face any type of violence. If she faced only physical violence then she scored 1while for only sexual violence she scored 2,and if she faced both physical and sexual violence she scored 3.Most of the independent variables were re-coded for the research purpose. Only the significant relationships were kept in the final model.

Methods:

Multinomial Logistic Regression Analysis: Let the response variable has J mutually exclusive and exhaustive categories, denoted by j=1, 2,...,J, the jth category is taken as the reference category for the response variable. Because the ordering of the category is arbitrary, any category can be j^{th} category, so that the choice of the ordering of the category is also arbitrary. Let there are also k predictor variables, denoted by $x_1, x_2,...,x_k$. The multinomial logit model is then specified in log form as:

$$\text{Log}\frac{P_i}{P_j} = \beta_{i0} + \sum \beta_{il}\, x_l \quad ; i \neq j = 1,2,...,J \text{ and } l = 1,2,3...,k$$

$$\sum P_j = 1;\ j = 1,2,3,...,J$$

Results and Discussion

Data reveals that about 50.8% respondents experienced any type of IPV during their lifetime (Table 1). It was found that the women from Sylhet division suffered the minimum level (7.6%) of IPV than the women from other five divisions (Table 1). The results showed that the respondents reported facing only physical violence by their counterparts more than the other two categories (only sexual and both).Almost 51.6% urban and 47.9% rural women (Table 1) reported that they were not affected by IPV of any type. However, physically these (urban and rural) women were affected almost equally. Though negligible, prevalence of only sexual violence is little more among rural women that their urban counter parts.The majority of the respondents were childless and there was significant variation of the prevalence of IPV by sex composition of children.

Regression analysis: The determinants of the IPV (no violence = 0, only physical violence = 1, only sexual violence = 2, both physical and sexual violence = 3) was explored using multinomial logistic regression model. Only the significant variables were presented (Table 2). Our categorization was mutually exclusive. Hence, the findings of this study may be different than other studies where experience of physical violence (or sexual violence) were measured irrespective of the presence of the other (physical or sexual). The regression analysis revealed that the women having only boy child and also having both types of children (boy and girl) had more likelihood of being affected only physically than the childless women when compared with no violence (Table 2). The likelihood of only sexual violence was more for the women having both types of children than the childless respondents when compared with no violence. The likelihood of being affected by both physical and sexual violence was more for the women having only boy than the childless women when compared to no violence. It is well recognized that there is

sex preference in Bangladeshi society especially towards male children. This may have behavioural implications. However, causal relationship between sex composition of children and IPV may be examined by qualitative studies.

Table 1. Intimate Partner Violence by different demographic and socio-economic characteristics (BDHS 2007)

Characteristics	Intimate Partner Violence (%)				
	Total No.	No violence	Only Physical violence	Only Sexual violence	Both Physical and Sexual violence
Administrative Division (*p*=0.0001)					
Barisal	519	46.2	34.5	3.7	15.6
Chittagong	652	50.9	33.6	4.8	10.7
Dhaka	846	46.9	37.5	3.5	12.1
Khulna	579	46.1	37.7	3.6	12.6
Rajshahi	719	49.2	33.8	4.3	12.7
Sylhet	271	64.6	25.5	2.2	7.7
Area of residence (*p*=0.047)					
Urban	1299	51.6	34.3	3.1	11.0
Rural	2287	47.9	34.9	4.3	12.9
Number of boys and girls (*p*=0.0001)					
Boy 0 Girl 0	974	53.6	31.2	4.0	11.2
Boy 1 Girl 0	384	51.0	33.3	7.0	8.6
Boy 0 Girl 1	345	56.2	31.0	2.0	10.7
Boy 1 Girl 1	553	45.9	36.0	4.0	14.1
Boy 2 Girl 0	252	46.4	39.7	2.8	11.1
Boy 0 Girl 2	177	46.9	36.7	2.8	13.6
Other	901	44.3	38.0	3.4	14.3
Total	3586	49.2	34.7	3.9	12.2

Note: Rows sum to 100% and p-value is observed from chi-square test.

Non-Muslim women had more likelihood of being affected by all types of violence than the Muslim women when compared to no violence. This study disagrees with other studies (Sayem*et al*., 2012; Jahan, 1994; Zaman, 1999) that Muslim women were more likely to suffer from sexual violence which may be due to *sharia* law. Such deference may lie with the fact that our study used mutually exclusive categories and hence require further investigation. The rich women had more likelihood of being suffered by only sexual violence than the poorest women when compared to no violence. This result corroborates more or less with the study by Kusanthan*et al*. (2016) among Zambian women. The likelihood of both physical and sexual violence was more for the poorer, middle and rich women than the poorest respondents when compared to no violence.

The wives of service holders and businessmen had a significant reduction in the only sexual violence and both physical and sexual violence than wives of farmers when compared to no violence. The primary educated women had a significant reduction in the only sexual violence compared to the uneducated women when compared to no violence. This may be due to the higher concerns among the primary educated women than uneducated women about their rights and subsequent protest against such attitude if any. Obviously education attaches higher status and ensures social protection. The wives of the primary educated partners had more likelihood to be abused by both physical and sexual violence than the wives of the uneducated partners when compared to no violence. Such results are very complex to interpret especially when sexual violence is measured using only one question (as done in this study). Moreover, no paradata were collected to justify such situations. Only socio-economic characteristics may fail to explain such complexity without taking into account any behavioural aspect of the husbands' and, timing and

intension of such violence. The women from all other divisions, except Rajshahi division, had less likelihood of experiencing both physical and sexual violence than the women from Barisal division when compared to no violence. Such result may be explained by regional differences between people's attitude and behaviour. Separate study may be designed to address this issue.

Table 2. Multinomial logistic regression estimates of the effects of different socio-economic and demographic characteristics on intimate partner violence

Independent variables	β	Odds ratio
Only physical violence *(r: No violence)*		
Intercept[§]	-0.877	0.416
Sex child*(r:No child)*		
Only boy	0.378[*]	1.459
Only girl	0.057	1.058
Both	0.224[**]	1.251
Religion *(r:Muslim)*		
Non-Muslim	0.181[**]	1.198
Only sexual violence *(r: No violence)*		
Intercept[§]	-3.373	0.034
Sex child*(r:No child)*		
Only boy	0.127	1.135
Only girl	-0.512	0.599
Both	0.413[***]	1.511
Religion *(r:Muslim)*		
Non-Muslim	0.496[**]	1.641
Wealth Index *(r: Poorest)*		
Poorer	0.449	1.567
Middle	0.438	1.550
Rich	0.629[***]	1.876
Partner's occupation *(r: Farmers)*		
Service and Business	-0.407[***]	0.666
Unemployed and others	0.112	1.118
Respondent's Education *(r: Uneducated)*		
Primary	-0.548[***]	0.578
Incomplete Secondary	-0.075	0.928
Complete Secondary and more	-0.054	0.947

Intercept[§]	-1.652	0.191
Sex child*(r: No child)*		
Only boy	0.439[*]	1.551
Only girl	0.043	1.044
Both	-0.078	0.925
Religion *(r:Muslim)*		
Non-Muslim	0.302[**]	1.352
Wealth Index *(r: Poorest)*		
Poorer	0.430[**]	1.537
Middle	0.525[*]	1.690
Rich	0.499[**]	1.648
Partner's occupation *(r: Farmers)*		
Service and Business	-0.240[***]	0.787
Unemployed and others	-0.131	0.877
Partner's Education *(r: Uneducated)*		
Primary	0.311[***]	1.365
Secondary	0.069	1.072
Higher	0.009	1.009
Division *(r: Barisal)*		
Chittagong	-1.264[*]	0.283
Dhaka	-0.532[*]	0.587
Khulna	-0.300[***]	0.741
Rajshahi	-0.229	0.795
Sylhet	-0.310[***]	0.734

Note: Level of significance: *p<0.01, **p<0.05, ***<0.10; *r* denotes the reference group; [§]*Odds;The model was fitted using 12 covariates. Only the significant variables were presented.*

Despite socio-economic development prevalence of IPV in a society may still exist due to various reasons. Hence, periodic studies related to IPV is necessary to adjust policy options to reduce such incidence from the society. The current study attempted to fill in the gaps in this sector. The main recommendation from this study is to formulate policies targeting different sub-groups of respondents as the situation and, cause and consequence of IPV are completely different among them. This study had to rely on the BDHS 2007 as IPV related information were not collected in later rounds of BDHS. However, results may still be useful as structural and behavioural changes within societies occur very slowly. It is recommended that BDHS should cover IPV related questions in future rounds. Also definition of sexual violence should be revisited and more than one question should be used. Para data related to IPV may be collected to help explain many complex results.

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