

Association between Child Marriage and Intimate Partner Violence in Four African Countries

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Introduction

Child marriage (marriage before age 18 years) and intimate partner violence are human rights, health, and social concerns. It is estimated that one third of girls in developing countries, excluding China, are married or in union before the age of 18 years. In some countries, more than 25% of girls under the age of 15 are also married (United Nations Children's Fund (UNICEF), 2011). Sub-Saharan Africa and Asia have the highest prevalence of child marriage, with the former region accounting for seven of the 9 countries in the world with more than a 50 percent prevalence of child marriage. Although a growing body of evidence suggests that child marriage has adverse health and social consequences, including an increased risk of unwanted pregnancy, short birth spacing, non-use of modern methods of contraception, high fertility, HIV infection, maternal and child mortality and morbidity, and a curtailment of girls' education (Nour, 2009; Raj et al., 2009, 2010; Santhya et al., 2009), there has been relatively little research on the association of child marriage with intimate partner violence (IPV). One study found that in Rajasthan, India, women aged 20-24 who married before age 18 had an increased risk of experiencing IPV in their lifetime and in the past 12 months compared to those who married later (Speizer and Pearson, 2011). This paper attempts to fill a gap in the literature by examining the association of child marriage with women's lifetime and recent experience of intimate partner emotional, physical and sexual violence in four countries of sub-Saharan Africa. Knowledge of these associations could help to improve the design and implementation of child marriage- and family violence prevention and mitigation policies and programs.

Data and Measures

The data come from Demographic and Health Surveys (DHS) conducted in four African countries –Ghana (2008), Nigeria (2008), Malawi (2010), and Zambia (2007). These countries have been chosen as they have more than a 30 percent prevalence of child marriage, a recent nationally-representative survey that includes a domestic violence module, more or less similar patterns of religious diversity and pre-independence political history, and because they permit a comparison of West, East, and Southern Africa. Analyses are restricted to women aged 20-29 years who are currently married or living together, have been married only once, and have no missing data on any of the variables included in the analysis. The analytical sample sizes are 500 for Ghana, 1, 817 for Malawi, 6,502 for Nigeria, and 1,536 for Zambia. The Institutional Review Board of ORC Macro provided ethical approval for the survey instruments and procedures.

The study examines the following indicators of women's experience of IPV victimization in their current union: emotional, physical, and sexual violence. Each indicator is dichotomous and has been created to reflect the lifetime or recent (past 12 months) occurrence of the particular form of violence in the union. Emotional violence is considered present if the respondent affirms that one or more of the following acts was committed by her husband/partner in the given reference period: (a) done or said something to humiliate her in front of other people; (b) threatened to hurt or harm her or someone close to her; and (c) insulted her or made her feel bad about herself. Physical violence is considered present if the respondent affirms that her husband/partner committed one or more of the following violent acts against her in the given reference period: (a) pushed, shook or threw something; (b) slapped her or twisted her arm; (c) punched her with a fist or something harmful; (d) kicked, dragged or beat her up; (e) tried to choke or burn her on purpose; and (f) threatened or attacked her with a knife, gun or any other weapon. Sexual violence indicates whether any of the following acts occurred during the given reference period in the context of the respondent's current union: (a) physically forced her to have sexual intercourse with him even when she did not want to; and (b) forced her to perform any sexual acts she did not want to.

Child marriage is defined as marriage before age 18 and consists of three categories which are derived from the age at first marriage: 18 years and older (reference group), 15 to 17 years (middle adolescence), and 14 years of age and younger (early adolescence or childhood). Relationship-level measures include husband/partner's education, alcohol use and controlling behaviors; respondent's dominance in decision making; and the spousal age gap. Individual-level measures include respondent's age education, religion, number of children ever born, employment

status, ethnicity/language, witnessing of inter-parental conflict as a child, and zero tolerance of wife beating; rural residence; region; and household wealth. Duration of marriage could not be included in the analysis due to problems of multicollinearity.

Methods

The data are weighted to adjust for the multi-stage stratified cluster sampling design. Using SVY logistic procedures in Stata 11.0, two separate multivariate logistic regressions are estimated for each outcome in order to assess whether any observed associations between child marriage and intimate partner violence are explained by individual- and relationship-level factors. We test for multicollinearity between the independent variables by calculating variance inflation factors (VIFs). The highest VIFs obtained for any variable were 4.42 in Ghana, 4.97 in Nigeria, 4.81 in Malawi, and 5.43 in Zambia.

Results

The prevalence of child marriage among women in the analytical sample ranges from 28% in Ghana to 48% in Zambia and 53% in Malawi and Nigeria. Most of these women first married in middle adolescence but in Nigeria one of five first married before the age of 15. As Table 1 shows, the prevalence of intimate partner emotional violence is significantly higher among Nigerian and Zambian women who married in early adolescence and childhood than among their counterparts who married in adulthood. In all countries except Nigeria, the reported prevalence of intimate partner physical violence in the past 12 months declines significantly with the age at first marriage. In Ghana, the prevalence of sexual violence is three times as high among women who married before the age of 15 as among those who married adulthood.

Table 2 presents odds ratios and 95% confidence intervals from separate logistic regressions predicting women's risk of experiencing IPV in the past 12 months. For each outcome, model 1 includes only the age at first marriage categories and model 2 controls for the full set of individual- and relationship-level variables. After controlling for confounding factors, child marriage is associated with higher odds of women experiencing intimate partner emotional violence in Zambia, intimate partner physical violence in Malawi, and intimate partner sexual violence in Ghana. Zambian women who marry at age 14 years or younger are more vulnerable to the risk of intimate partner emotional violence than their counterparts who marry at ages 15-17. In Nigeria and Zambia, women marrying at ages 15-17 have higher odds of experiencing intimate partner physical violence in the past 12 months than their counterparts who marry at age 18 years or older. Limitations of the analysis include the ability of the Modified Conflict Tactics Scale used in the DHS to capture culturally-specific forms of intimate partner violence against women; the difficulty of establishing causality due to the cross-sectional nature of the data; and the endogenous relationship between child marriage and female dominance in decision making, a potential moderating factor. The findings suggest that there is a need for child marriage prevention and mitigation programs to work hand in hand with domestic violence prevention programs and call for targeted efforts to change cultural norms surrounding early marriage and intimate partner violence.

References

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Tables

Table 1 Percentage of currently married women aged 20-29 years who are in their first marriages and who experienced intimate partner violence in the past 12 months, by type of violence, age at first marriage, and country, 2007-2010

Type of IPV/Age at First Marriage	Ghana 2008	Malawi 2010	Nigeria 2008	Zambia 2007
Emotional IPV				
<=14	32.7	24.4	26.1	34.2
15-17	33.4	23.1	23.9	22.8
18+	26.8	20.5	18.8	20.5
Total	29.0	22.1	22.0	22.6
Sig.			***	**
Physical IPV				
<=14	37.9	28.5	13.1	53.0
15-17	26.1	20.9	16.8	51.7
18+	17.4	16.3	19.1	44.2
Total	21.0	19.6	17.1	47.9
Sig.	*	*	***	*
Sexual IPV				
<=14	13.2	17.9	3.4	19.3
15-17	9.0	15.1	4.1	17.6
18+	3.9	14.5	4.2	14.7
Total	5.8	15.1	4.0	16.3
Sig.	*			
N	500	1,817	6,502	1,536

*** p<.001

** p<.01

* p<.01

Significance levels apply to age at marriage differentials in IPV within each country.

Table 2 Odds ratios and 95% confidence intervals from logistic regressions models of the association between child marriage and intimate partner violence in the past 12 months by type of violence, currently married women aged 20-29 years who are in their first marriages, 2007-2010

Type of IPV/Age at first marriage	Ghana		Malawi		Nigeria		Zambia	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Emotional								
<=14	1.354 <i>(0.538, 3.410)</i>	1.997 <i>(0.637, 6.255)</i>	1.254 <i>(0.760, 1.600)</i>	1.451 <i>(0.789, 2.667)</i>	1.521 *** <i>(1.247, 1.856)</i>	1.116 <i>(0.841, 1.481)</i>	2.016 ** <i>(1.303, 3.120)</i>	2.133** <i>(1.252, 3.635)</i>
15-17	1.401 <i>(0.858, 2.288)</i>	1.808 + <i>(0.924, 3.537)</i>	1.168 <i>(0.852, 1.600)</i>	1.362 <i>(0.879, 2.109)</i>	1.354 *** <i>(1.144, 1.602)</i>	1.096 <i>(0.891, 1.349)</i>	1.146 <i>(0.850, 1.546)</i>	1.167 <i>(0.813, 1.674)</i>
Constant	0.358*** <i>(0.273, 0.470)</i>	0.046 <i>(0.001, 1.719)</i>	0.258 *** <i>(0.201, 0.330)</i>	0.014 *** <i>(0.001, 0.141)</i>	0.232 *** <i>(0.207, 0.261)</i>	0.126 *** <i>(0.052, 0.308)</i>	0.258 *** <i>(0.206, 0.321)</i>	0.099 + <i>(0.008, 1.177)</i>
Test of OR difference: <=14 and 15-17		ns		ns		ns		*
Group significance of marriage categories		ns		ns		ns		*
Physical								
<=14	2.886 * <i>(1.153, 7.221)</i>	3.071 + <i>(0.948, 9.951)</i>	2.039 ** <i>(1.221, 3.405)</i>	2.056 * <i>(1.126, 3.755)</i>	0.634 *** <i>(0.519, 0.776)</i>	1.088 <i>(0.813, 1.456)</i>	1.424 + <i>(0.963, 2.107)</i>	1.358 <i>(0.847, 2.179)</i>
15-17	1.675 + <i>(0.991, 2.831)</i>	1.232 <i>(0.595, 2.549)</i>	1.353 <i>(0.944, 1.938)</i>	1.361 <i>(0.852, 2.175)</i>	0.854 + <i>(0.724, 1.009)</i>	1.279 * <i>(0.1.030, 1.588)</i>	1.349 * <i>(1.060, 1.717)</i>	1.360 * <i>(1.012, 1.827)</i>
Constant (S.E.)	-0.211*** <i>(0.948, 9.951)</i>	0.091 <i>(0.002, 5.269)</i>	0.195 <i>(0.150, 0.255)</i>	-0.039 ** <i>(0.004, 0.388)</i>	0.237 *** <i>(0.212, 0.264)</i>	0.055 *** <i>(0.021, 0.146)</i>	0.793 ** <i>(0.672, 0.936)</i>	0.260 <i>(0.042, 1.611)</i>
Test of OR difference: <=14 and 15-17		ns		ns		ns		ns
Group significance of marriage categories		+		*		ns		+
Sexual								
<=14	3.781 + <i>(0.908, 15.737)</i>	11.113 * <i>(1.684, 73.340)</i>	1.289 <i>(0.715, 2.326)</i>	1.308 <i>(0.686, 2.493)</i>	0.809 <i>(0.554, 1.181)</i>	1.035 <i>(0.600, 1.783)</i>	1.385 <i>(0.902, 2.813)</i>	1.605 <i>(0.916, 2.813)</i>
15-17	2.451 * <i>(1.053, 5.704)</i>	5.399 * <i>(1.401, 20.804)</i>	1.053 <i>(0.722, 1.534)</i>	0.983 <i>(0.596, 1.623)</i>	0.973 <i>(0.699, 1.355)</i>	1.286 <i>(0.855, 1.933)</i>	1.305 <i>(0.829, 2.055)</i>	1.305 <i>(0.829, 2.055)</i>
Constant (S.E.)	0.040 *** <i>(0.023, 0.071)</i>	2.07e-11 <i>(5.44e-15, 7.87e-8)</i>	0.169 *** <i>(0.129, 0.221)</i>	0.004 *** <i>(0.003, 0.048)</i>	0.044 *** <i>(0.035, 0.055)</i>	0.005 *** <i>(0.001, 0.034)</i>	0.172 *** <i>(0.136, 0.219)</i>	0.015 ** <i>(0.001, 0.265)</i>
Test of OR difference: <=14 and 15-17		ns		ns		ns		ns
Group significance of marriage categories		**		ns		ns		ns
N	500		1,817		6,502		1,536	

*** p<.001

** p<.01

* p<.01

95% CI for odds ratios are in italics.

Model 2 controls for education, age, household wealth, religion, number of children ever born, employment, witnessed father beating mother in childhood, ethnicity/language, zero tolerance of wife beating, rural residence, region, partner's alcohol use, partner's education, partner's controlling behaviors, spousal age gap, and index of respondent's dominance in decision making.