Intimate Partner Violence Outcomes in the Wake of Armed Conflict

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Introduction

Intimate partner violence (IPV) has serious health consequences, both for immediate victims (Campbell 2002; Coker et al. 2000; McNutt et al. 2002) and their children (Band-Winterstein 2014). Research to understand IPV has focused extensively on psychological (e.g., Gerlock, Grimesey, and Sayre 2014; Orcutt, King, and King 2003) and interpersonal (e.g., Friedemann-Sánchez and Lovatón 2012; Svec and Andic 2018) factors. To date, research on the role of broader contextual factors on IPV is more limited (Capaldi et al. 2012).

Around the world, one potentially important contextual factor is exposure to the violence of armed battles. High levels of community and regional violence are indicative of lower levels of social control and community cohesion (Brehm 2016), which may, in turn, be associated with greater levels of family violence. A relationship between war and IPV is supported by studies in war-torn areas (Annan and Brier 2010 [Palestine]; Gutierrez and Gallegos 2016 [Peru]; Kelly et al. 2018 [Liberia]), and in a study comparing IPV across groups of migrants who had or had not been exposed to violence in their sending countries (Gupta et al. 2009). Our research extends these studies to consider whether exposure to battles at any level, not only at the level of all-out war, is a risk factor for IPV and, if so, whether this relationship holds broadly across a range of countries. We hypothesize that even with relatively low levels of conflict, exposure to local conflict events will lead to an increase in intimate partner violence. We consider this question across five sub-Saharan African countries during periods when they experienced localized armed battles, but not civil or international wars.

Data and Methods

Data for this study come from IPUMS DHS (Boyle, King, and Sobek 2018), an integrated and harmonized version of the Demographic and Health Surveys with contextual variables attached to individual records. The DHS are nationally representative surveys of women of childbearing age (15-49); women who are married or partnered are asked questions about IPV. Samples in our analysis include Cameroon (2011), Kenya (2014), Malawi (2016), Mali (2012) and Rwanda (2014). We also use IPUMS DHS contextual data from the Armed Conflict Location Event Database (ACLED), an aggregation of world conflict event data (Raleigh et al. 2010). All ACLED data are sourced through local, regional, national, or international media and NGO reports. In IPUMS DHS, these ACLED data are matched with DHS survey respondents through GPS coordinates for survey clusters. In total, the pooled sample contains 97,605 women.

Our dependent variable is a dichotomous variable indicating whether a woman has experienced IPV. To create the variable, we combined and recoded eight questions from the DHS domestic violence module, that together ask if a respondent had been pushed, shaken, thrown, slapped, arm-twisted, pulled, punched, strangled, burned, kicked, or dragged within the past twelve months. Women who had any of these experiences were coded as "1"; all others were coded as "0."

Our primary independent variable is a dichotomous indicator of whether any battles occurred within 10 kilometers of a woman's survey location (determined by GPS coordinates). ACLED battle years were recoded to match with the "past twelve months" qualifier in the DHS survey question. To pair ACLED data with DHS responses, relevant battles in the areas of interest were matched with DHS GPS coordinates in the IPUMS-DHS database.

Table 1. Descriptive statistics		
Variable	Percent	
IPV	19	
Battles	25	
Polygamous Relationship	25	
Urban	34	
Wealth		
Poorest	20	
Poorer	19	
Middle	20	
Richer	20	
Richest	21	
Earning Type		
Not Paid	57	
Cash Only	27	
Cash & In Kind	11	
In Kind	4	
Educational Attainment		
None	24	
Primary	48	
Secondary	24	
Higher	4	
	Mean	Std. Err
Age	28.38	0.085
Children Ever Born	3.02	0.026

To minimize the risk of confounded results, we included a wide variety of control variables in the analysis. These controls included respondent characteristics (polygamous relationship, age, education level, type of work earnings, and children ever born) and household characteristics (wealth quintile and urban or rural status).

We used multilevel logistic regressions to calculate the odds of experiencing IPV. Multilevel models were appropriate, as approximately 9% of the variance in our pooled sample was explained by regional differences. Our multilevel models allowed intercepts to vary by region. Table 1 shows the sample descriptive statistics (weighted by the DHS domestic violence weight).

Preliminary Results and Conclusions

Table 2 shows the results of our multilevel logistic regression. Results report odds ratios and standard errors. We find that our hypothesis is confirmed: exposure to any level of battles is associated with a 15% increase in the odds of IPV (OR=1.146, $p < 0.05$) in our five countries. Other statistically significant findings are as follows: Women in polygamous relationships have 20% greater odds of experiencing IPV than women in monogamous unions (OR=1.203, $p < 0.05$). Each additional child increases the odds of IPV by 4% (OR=1.042, $p < 0.05$). This could

be because higher levels of fertility and IPV are both associated with more patriarchal communities. Women with the highest levels of education had lower levels of IPV.

Table 2. Multilevel logistic regression of experiencing at least one incidence of intimate partner violence in the past 12 months		
Battles	1.146*	(0.079)
Years Married		
Consensual Unions	1	
0 to 4	0.925	(0.212)
5 to 9	1.227	(0.261)
10 to 14	1.213	(0.199)
15 to 19	1.065	(0.168)
20 to 24	1.060	(0.152)
25 to 29	1.031	(0.149)
Polygamous Relationship	1.203*	(0.092)
Urban	1.013	(0.095)
Age	0.973***	(0.007)
Children Ever Born	1.042*	(0.021)
Educational Attainment		
None	1	
Primary	1.119	(0.093)
Secondary	0.950	(0.094)
Higher	0.498**	(0.107)
Wealth		
Poorest	1	
Poorer	0.964	(0.049)
Middle	0.888	(0.062)
Richer	0.886	(0.098)
Richest	0.786	(0.109)
Earning Type		
Not Paid	1	
Cash Only	1.162	(0.099)
Cash & In Kind	1.492***	(0.106)
In Kind	1.685**	(0.303)
Constant	1.474**	(0.187)
Number of Regions	37	
Observations	21778	
Log. Likelihood	-9348.5	
AIC	18743.1	
BIC	18926.8	
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$		

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