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Intimate partner violence, pregnancy intention and contraceptive use in Honduras

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ABSTRACT

Objective(s): We explored the relationship between Intimate Partner Violence (IPV), pregnancy intention and contraceptive use in Honduras.
Study design: We used the most recent Honduras Demographic and Health Survey (DHS 2011–2012) data to examine the relationship between physical IPV, sexual IPV and emotional IPV with pregnancy intention; contraceptive use; and husband's knowledge of contraceptive use among a sample of 6629 women. Multiple logistic regression was used to estimate effects of IPV on the outcomes, controlling for empowerment indicators and socio-demographic variables.
Results: Among currently married women with at least one living child born within the past 5 years, IPV was significantly associated with several outcomes. Women reporting any physical IPV (13.5%) were less likely to have wanted their last child (aOR: 0.52, p<.001) or to desire future children (aOR: 0.76, p=.002), and more likely to have ever used contraception (aOR: 2.32 p=.004). Those reporting physical with sexual violence (4.1%) were less likely to have wanted their last child (aOR: 0.59, p=.016). Women reporting emotional IPV (27.4%) were less likely to have wanted their last child (aOR: 0.56, p<.001) or to desire more children (aOR: 0.81, p<.001) and more likely to have ever used (aOR: 1.78, p<.001) and currently be using contraception (aOR: 1.19, p=.006).
Conclusion(s): IPV was associated with both unwanted pregnancy and increased contraceptive use among married Honduran women. Universal screening for IPV among women who seek SRH services in Honduras may help identify women in need and reduce stigma around IPV while improving SRH outcomes.
Implications: Honduran women exposed to intimate partner violence (IPV) were more likely to have ever used contraception yet more likely to report an unwanted pregnancy. Universal screening for IPV among women seeking sexual and reproductive health services may help identify women in need and reduce stigma around IPV while improving outcomes.

1. Introduction

Intimate partner violence (IPV) is any behavior within an intimate relationship that causes physical, psychological or sexual harm to those in the relationship [1]. Globally, about 35% of women who have been in a relationship have experienced either physical or sexual IPV [1]. Prevalence rates of IPV in Latin America are among the highest in the world [2]. In 2011 and 2012, 27% and 22% of Honduran women of reproductive age reported ever experiencing physical violence in their lifetime and in the past 12 months, respectively [3].

Previous studies have linked IPV to poor sexual and reproductive health (SRH) outcomes for women [1,2,4]. In both developing and developed countries, IPV is associated with an increased risk for unintended and unwanted pregnancies [4,5], as women exposed to IPV may face difficulty in expressing and making decisions about their fertility [5]. Subsequently, adverse maternal and neonatal health outcomes are associated with unintended or unwanted pregnancies [6]. Studies from a range of countries have consistently found increased odds of induced abortion and miscarriage, as well as a higher likelihood of low birth weight deliveries, stillbirths and neonatal deaths among women reporting unintended or unwanted pregnancies [2,5,7]. Induced abortions pose a serious danger to women's health, particularly when performed under unsafe conditions [5]. Unsafe abortions are more prevalent in contexts with restrictive policies, such as Honduras, where abortions are illegal without exceptions [8,9].

Varied, contradictory findings exist in the literature examining IPV and contraceptive use. A meta-analysis of longitudinal studies conducted in developing and developed countries, mostly in the Americas, found that women experiencing IPV were less likely to use

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contraception, especially partner-dependent methods [10]. Conversely, analysis from six sub-Saharan African countries found women exposed to IPV were more likely to have used contraception, especially without partners' knowledge [11,12]. Women exposed to IPV, however, reported more unintended pregnancies despite higher likelihood of contraceptive use [13]. IPV potentially compromises both the ability to negotiate and the effectiveness of contraceptive use, reflecting the moderating role of contextual factors [10,11]. Women's empowerment is one moderating factor that can be protective or risk factor for IPV, but which increases odds of contraceptive use through more interaction with SRH information and services [14–17].

Interpersonal violence is rising in Latin America and the Caribbean, despite declining prevalence elsewhere. Low- and middle-income countries in the Americas reported an annual rate of 28.5 violent deaths per 100,000 population; Central America had the highest homicide rate (30/100,000) globally [18]. With nearly 8.5 million inhabitants, Honduras had the highest global homicide rate (90.4/100,000) in 2011 and 2013 [18] and ranks seventh for female homicides [19]. IPV, a leading cause of female homicides, remains the country's top reported crime [3]. In 2012, about 75% of all reported cases of violence against women in Honduras were linked to IPV and intra-family violence [3]. In 2017, 389 of 987 reported deaths by external or violent causes among women were due to homicide [20]. Over three-quarters of these violent deaths (79%) occurred among women of reproductive age, 15–49 years, and over half (55%) occurred among young women 15–24 years [20]. Standard of care guidelines from the Honduran Ministry of Health focus on women who present with symptoms of violence [21]. While screening is mandated, structural factors such as the time required for additional paperwork, safety of providers reporting IPV against patients, and an under-resourced, strained health system often means it does not happen.

In a context with pervasive violence against women, there is a need to understand how IPV affects women's SRH outcomes in order to develop tailored strategies to improve those outcomes. Therefore, we explored the relationship between IPV, pregnancy intention and contraceptive use among women in Honduras.

2. Methods

2.1. Sample

We used the 2011–2012 Honduras Demographic Health Survey (DHS) with a stratified two-stage cluster design. At the first stage, enumeration areas (EAs) representing roughly equal population sizes were selected from 2001 census files stratified by urban or rural residence. At the second stage, 23,475 households were randomly selected within each EA; 91% of selected households were surveyed. From these households, 24,414 women aged 15–49 years were eligible, with a 93% response rate. The domestic violence module was administered to one randomly selected woman per household. Here, 6629 out of the 8332 women who completed the domestic violence module met our inclusion criteria of being currently married/living together and having at least one living child under 5 years [22]. We limited our sample based on these inclusion criteria because we were interested in husbands' knowledge of contraceptive use and pregnancy intention.

2.2. Measures

Pregnancy intention, contraceptive use, and husband's knowledge of contraceptive use were our primary outcomes. Pregnancy intention was divided into past and future intention. Past intention was defined as wanted last pregnancy; future intention measured the desire for more children. Contraceptive use was classified as ever and current use. Husband's knowledge of contraceptive use captured whether the husband knew that the respondent was using contraception.

IPV was the exposure variable, separated into yes/no responses to physical, physical with sexual violence and emotional IPV. Physical violence was defined as husband/partner ever doing any of the following to her: pushing or shaking, throwing something, slapping, twisting arm or pulling hair, punching, kicking, dragging, beating, trying to choke or burn on purpose, or threatening or attacking her with a knife, gun or other weapon. Physical with sexual violence was defined as one of the above plus any of the following: physically forcing or threatening her to have sexual intercourse or perform any other sexual acts when she did not want to do so. Emotional violence was defined as having experienced any emotional violence by the husband/partner.

Women's empowerment has been associated with IPV and contraceptive use [14,15]. Here, women's participation in household decision-making and attitudes toward wife beating were the main empowerment variables available. Participation in household decision-making was defined as making decisions about one or more of the following: her own health care, large household purchases, household purchases for daily needs, visits to family or relatives, food to be cooked each day, or what to do with husband's earnings. Attitude toward wife beating was assessed by whether a woman agreed that a husband is justified in hitting or beating his wife under any of the following circumstances: going out without telling him, neglecting the children, arguing with him, refusing to have sex with him, or burning the food.

The analyses controlled for socio-demographic characteristics of women and their partners [4,23]. Women's and husband's education levels were categorized by highest level completed. Women's literacy was based on the ability to read all or part of a sentence. Women's current employment status was defined as working outside the home or not. Residence was categorized as urban or rural. Household size, parity and wealth index were continuous variables.

2.3. Analysis

We incorporated stratification, clustering, and weight variables in all our analyses, using the survey procedures in SAS Version 9.4 (SAS Institute, Cary, NC, USA). The DOMAIN statement in SAS was used to analyze the sub-sample. For bivariate analysis, chi-square and t-tests were used for categorical and continuous variables, respectively. Logistic regression models were used to examine whether physical, physical with sexual, or emotional IPV were associated with past or future pregnancy intention and past or current contraceptive use, controlling for empowerment and sociodemographic covariates. Reported odds ratios and 95% confidence intervals describe the strength of the associations.

2.4. Ethics

We analyzed de-identified, secondary data obtained through the DHS public request process. The Institutional Review Board (IRB) of Saint Louis University reviewed and approved the study.

3. Results

3.1. Sample

From the 2011–2012 Honduras DHS, a total of 6629 women completed the domestic violence module, were married/living with partner, and had least one living child under 5 years (Table 1). Most women participated in household decision making (97.9%), disagreed that a husband was justified in hitting or beating his wife (84.6%), had primary-level education (62.3%), were literate (89.8%), were not employed outside the home (64.4%), and lived in a rural residence (56.5%). On average, women were 28.9 years old. Their husbands, most who also had primary-level education (65.9%), were slightly older (m=33.5 years). A full description of the sample is provided elsewhere [24].

Table 1
Overall sample characteristics of women who were married and had at least one living child ≤5 years from the 2011–2012 Honduras Demographic and Health Survey (n=6629).*

Characteristics	Overall n (%)	Outcome variables	Overall n (%)
Participation in decision making		Wanted last child	
No	175 (2.1)	Yes	4875 (87.2)
Yes	6451 (97.9)	No	724 (12.8)
Attitude toward wife beating		Desire to have children	
Justified	1185 (15.4)	Yes	3063 (44.8)
Not justified	5423 (84.6)	No	3563 (55.2)
Women's education		Past contraceptive use	
No education	392 (5.0)	Yes	6321 (96.2)
Primary	4380 (62.3)	No	308 (3.8)
Secondary	1602 (28.0)	Current contraceptive use	
Higher	255 (4.7)	Yes	5061 (78.2)
Women's literacy (n=6614)		No	1568 (21.8)
Illiterate	798 (10.2)	Husband's knowledge of contraceptive use	
Literate	5816 (89.8)	Yes	4956 (98.4)
Women's employment (n=6622)		No	86 (1.6)
Not employed	4391 (64.4)		
Employed	2231 (35.6)		
Residence			
Rural	4517 (56.5)		
Urban	2112 (43.5)		
Husband's education (n=6624)			
No education	486 (6.3)		
Primary	4566 (65.9)		
Secondary or higher	1572 (27.7)		
Women's age (y) (mean)	28.9 (28.7–29.1)		
Husband's age (y) (mean)	33.5 (33.3–33.8)		
Household size (mean)	5.3 (5.2–5.4)		
Parity (mean)	2.8 (2.8–2.9)		

Results are displayed as n (%)* or mean with 95% confidence level (CL).
* Weighted percentages.

3.2. IPV, pregnancy intention and contraceptive use

Regarding IPV, 13.5% of women reported physical IPV, 4.1% reported physical with sexual IPV, and 27.4% reported emotional IPV. Most women wanted their last pregnancy (87.2%), had ever used (96.2%) and were currently using (78.2%) contraception, and their husbands knew (98.4%) about their contraceptive use. Since nearly all women reported husband's knowledge of their contraceptive use, we did not explore this outcome further. Less than half of women desired more children (44.8%) (Table 1).

3.3. Associations with IPV, pregnancy intention and contraceptive use

Adjusting for empowerment and socio-demographics indicators, exposure to physical, physical with sexual IPV and emotional IPV were significantly associated with pregnancy intention and contraceptive use (Table 2). Women reporting any physical IPV were 48% and 25% less likely to have wanted their last pregnancy or to desire more children, respectively. They were also more likely (aOR: 2.32 CI: 1.31–4.12) to have ever used contraception. There was no relationship between exposure to physical IPV and current contraceptive use. Women who reported physical with sexual IPV were 40% less likely to have wanted their last child. Physical with sexual IPV was not associated with the desire for more children or with ever or current contraceptive use. Women who reported emotional IPV were 44% and 19% less likely to have wanted their last pregnancy or to desire more children, respectively. These women were 78% and 19% more likely to have ever used and currently be using contraception.

Table 2
Association of physical and physical with sexual IPV with pregnancy intention and contraceptive use, 2011–2012 Honduras Demographic and Health Survey.

IPV	Pregnancy intention		Contraceptive use	
	Wanted last child	Desire more children	Ever-used	Current use
Physical IPV				
Yes	0.52* (0.41–0.66)	0.76* (0.63–0.90)	2.32* (1.31–4.12)	1.10 (0.89–1.35)
No	1.00	1.00	1.00	1.00
Physical with sexual IPV				
Yes	0.59* (0.39–0.91)	0.81 (0.57–1.17)	0.44 (0.18–1.03)	1.34 (0.93–1.94)
No	1.00	1.00	1.00	1.00
Emotional IPV				
Yes	0.56 (0.45–0.70)	0.81 (0.70–0.94)	1.78 (1.18–2.70)	1.19 (1.02–1.40)
No	1.00	1.00	1.00	1.00

aOR controlled for covariates: participation in household decision-making; attitudes toward wife beating; women's age; women's education; women's literacy; women's employment; residence; household size; parity; husband's age; husband's education.
* aOR significant at <0.05.

4. Discussion

In this nationally representative study among married/cohabitating Honduran women with at least one living child under 5 years, physical, sexual, and emotional IPV were associated with SRH outcomes. Women reporting physical IPV were less likely to have wanted their last pregnancy or to desire more children and more likely to have ever used contraception. Women reporting sexual IPV were also less likely to have wanted their last pregnancy. Those reporting emotional IPV were less likely to have wanted their last pregnancy or desire more children and more likely to have ever used or to currently use contraception. The findings are consistent with previous research in other countries including Nicaragua and Guatemala [2,4,5]. Contextual factors, such as organized crime and drug trafficking, an ineffective justice system, gender inequality, and *machista* culture (harmful masculinity), may contribute to the link between IPV and SRH in Honduras [3,25].

We found an association between all three forms of IPV and unwanted pregnancy. Population-based studies, including those using the DHS in low- to middle-income countries like Honduras, have similar findings [2,5,13,26–28]. Women exposed to physical or emotional IPV in Pakistan and physical or sexual IPV in Nicaragua were more likely to report unintended pregnancies [26,28]. Although most studies have found

exposure to any form of IPV a significant risk factor, in some cases only exposure to physical IPV or sexual IPV were linked to unintended pregnancies [15,29]. Furthermore, previous research has found a relationship between unintended pregnancies and other forms of IPV, including controlling behaviors [26,28]. Controlling behaviors can interfere with women's reproductive freedom by limiting access to and use of contraception [28,30,31]. Future research is needed in Honduras to determine the interacting effect of other forms of IPV on women's SRH outcomes.

Within the context of IPV, other studies have found a higher likelihood of induced abortion when a pregnancy is unintended or unwanted [5,30]. In Honduras, however, abortions are completely illegal [8] and heavily criminalized [3]. Further, the sale, distribution and use of emergency contraception are prohibited [3]. In such settings with restrictive laws on abortion and emergency contraception yet high rates of sexual violence, there may be severe negative consequences for women exposed to IPV, including increased likelihood of unsafe abortions.

Contraceptive use moderates the relationship between IPV and unwanted pregnancies. Previous research found that after controlling for contraceptive use and other covariates, there was no longer an association between IPV and unintended pregnancy [13,32]. We found that women who were exposed to physical IPV were more likely to have ever used contraception. Research in Bolivia and Nicaragua shows that women reporting IPV are more likely using modern contraception, especially pills or other methods that can be used covertly [11,12,33]. Conversely, IPV has been associated with decreased odds of condom use, a male-dependent method of contraception [10,13]. This suggests that the effect of IPV on contraceptive use depends on type of contraception. Women experiencing IPV may prefer to use methods that do not require their partner's knowledge or approval in an attempt to avert pregnancy or avoid bringing a child into unfavorable conditions [10,34]. Here, husband's knowledge of contraceptive use was so high (98.4%) that we could not explore the association with IPV nor method mix. Further investigation of these relationships in this setting is needed, as well as the most commonly used and preferred contraception for women exposed to IPV.

Despite increased contraceptive use here, women were still at increased risk for unwanted pregnancies. This may reflect other mechanisms by which IPV influences contraceptive use. Exposure to violence may affect women's mental health, reduce self-esteem, diminish their autonomy and lessen decision making power, all which compromise the ability to negotiate contraceptive use [27,32]. Here, the association between IPV and SRH outcomes remained significant even after controlling for women's decision-making, suggesting other pathways may play a role in this association. Beyond limiting access to healthcare and contraception, IPV may facilitate contraceptive discontinuation and failure, thus, reducing contraceptive effectiveness [28].

This study has several limitations. We used secondary data and were thus limited to the variables in the dataset. Specifically, it is unknown whether the partner with whom the respondent conceived her last pregnancy also perpetrated the IPV. Second, the DHS captures self-report data, which may be subject to recall or social desirability bias. The sensitive nature of IPV and associated privacy and safety concerns may have limited willingness to report IPV. Women may also be wary to report their past pregnancy as unwanted after the child has been born, which may result in underreporting or misclassification. Third, the cross-sectional nature of the data limits our ability to establish a causal relationship between IPV and SRH outcomes. Finally, while we used the most recent 2011–2012 DHS data, the context may have changed.

Despite these limitations, SRH implications for women exposed to IPV remain. The DHS uses a nationally representative sample which allows for generalizability to women with similar experiences in Honduras. Further, the DHS uses a well-known and tested methodology for collecting sensitive data which enhances confidence in the data quality [35]. Finally, the high response rate enhances validity.

We found a relationship between all three forms of IPV and SRH outcomes, including past and future pregnancy intention and ever and current contraceptive use. Strategies to address unmet need for contraception in Honduras must include IPV screening during SRH services and tailored interventions. Future research is needed to understand the effect of IPV on specific types of contraceptive use in Honduras.

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Declarations of interest

None.

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