Intimate partner and nonpartner violence against pregnant women in rural Haiti

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Abstract

Objective—To examine the association between violence experienced by pregnant Haitian women in the previous 6 months and pregnancy-related symptom distress.

Methods—A total of 200 women seeking prenatal care at community health dispensaries in the Artibonite Valley were interviewed.

Results—Over 4 in 10 women (44.0%) reported that they had experienced violence in the 6 months prior to interview; 77.8% of these women reported that the violence was perpetrated by an intimate partner. Those who experienced intimate partner violence reported significantly greater pregnancy-related symptom distress (β=0.23, *P*=0.001). No significant differences between violence perpetrated by family members or others and reporting of symptoms were observed (β=0.06, *P*=0.38).

Conclusion—The findings indicate the need to integrate violence screening, resources, and primary prevention into prenatal care in rural Haiti.

Keywords

Haiti; Intimate partner violence; Maternal morbidity; Pregnancy

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1. Introduction

Some of the Western Hemisphere's gravest maternal and infant health indicators continue to persist in the Republic of Haiti. With a maternal mortality rate of 680 per 100 000 live births [1], nearly 3 times more women die from pregnancy- and childbirth-related complications in this impoverished nation than in the Latin American and Caribbean (LAC) region as a whole

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[1]. Equally alarming is Haiti's neonatal mortality rate, currently at 34 deaths per 1000 live births [1]. These figures clearly underscore the need for implementation of research and health programs to reduce these rates.

One critical factor linked to morbidity during pregnancy in diverse populations worldwide is violence against women [2–5]. Although most research has focused on violence from intimate partners, work has also documented negative associations with nonpartner violence [6]. Previous research in Haiti has documented high rates of violence against women, with national estimates indicating that 16% of women had experienced sexual violence from an intimate partner [7], while 29% had experienced physical and sexual violence [8,9]. A clinic-based study documented the prevalence of sexual violence as 54% among women attending community health centers [10]. Furthermore, in addition to intimate partner violence, other forms of violence against women have been documented in Haiti, such as nonpartner sexual violence and violence perpetrated by family members [11,12]. These forms of violence have also been associated with poor pregnancy outcomes in other settings [13]; however, similar investigations have not been conducted in Haiti. Considering Haiti's dual public health challenge of violence against women and poor maternal health, a better understanding of the relationship between violence and pregnancy-related morbidity is essential.

The aim of the present study was to examine the association between violence experienced by pregnant Haitian women and maternal health. Specifically, the analyses provide estimates of recent physical and sexual violence against pregnant women, and women's experience of symptoms of pregnancy-related distress caused by exposure to violence perpetrated by intimate partners, family members, or others.

2. Materials and methods

Data used in the present study are from a parent, cross-sectional study aimed at examining maternal health and sexual risk among young pregnant women in Haiti. We performed a cross-sectional study in 5 community dispensaries of the Hospital Albert Schweitzer in Deschapelles, Haiti. Data collection took place from May 2003 to September 2003. The study was approved by the Yale University Human Investigations Committee and the Hospital Albert Schweitzer Ethics Committee.

Hospital Albert Schweitzer provides free services to a catchment area of approximately 200 000 in the rural Artibonite valley region. Approximately 80% of all pregnant women receive at least 3 prenatal visits at either the hospital or one of its 7 surrounding dispensaries [14]. The 5 selected dispensaries were representative of the geographic diversity of the area served and included 2 dispensaries from the mountains, 2 from the valley, and the hospital dispensary. Pregnant women seeking prenatal care at any of the 5 dispensaries were invited to participate in the study, regardless of gestational age, by a trained Haitian creole-speaking female research assistant. Participants were informed of the voluntary nature of the study and were not compensated for participation, in accordance with hospital practice. After they had provided informed consent the women participated in a 40-minute, face-to-face, structured interview conducted by the research assistant in a private area of the dispensary.

The questionnaires were translated into Haitian creole and pilot tested among a group of healthcare workers. Responses were translated from English to Haitian creole and back translated to English.

Any physical or sexual violence experienced by the participants in the 6 months prior to the interview were assessed using modified items from the physical and sexual violence subscales of the Conflict Tactics Scale-2 [15]. This measure has been validated in multiple

settings [9,16]. Physical abuse was evaluated by asking the women how often they had been pushed, hit, kicked, or slapped in the past 6 months. To assess sexual abuse, women were asked how often they had been forced to have sex or perform a sexual act against their will in the past 6 months. Three dichotomous variables were created to assess the women's experience of violence: (1) any violence (yes to physical or sexual violence items); (2) physical violence (yes to a physical violence assessment item); (3) sexual violence (yes to a sexual violence assessment item). Respondents who reported any violence in the previous 6 months were asked to specify the perpetrator: intimate partner, family member, friend, or stranger.

To assess the physical symptoms of pregnancy-related distress, women were asked whether they had experienced any of 15 common physical symptoms of pregnancy during the month preceding the interview, including vaginal bleeding, low abdominal pain, vomiting, heartburn, frequent urination, fatigue, and low back pain. The responses were on a 5-point, Likert-type scale, from 0 = never to 4 = always. The scale was modeled on symptom distress scales used to assess other medical conditions (e.g. cancer) [17]. In these scales, a set of items that assess perceived distress about clinically relevant symptoms are used to form an overall scale or index of perceived symptom distress. Symptom distress scales have been linked to both physical and emotional quality of life for other medical conditions [18]. The scale assesses the overall level of distress due to common pregnancy symptoms and was shown to be reliable and valid among young pregnant American women [19]. Furthermore, the scale had adequate internal consistency (α=0.70) and related to a measure of general stress during the pregnancy period (r=0.37, P<0.001) in the current sample, demonstrating internal consistency and convergent validity. High scores indicated greater distress from symptoms.

Maternal demographic data collected were age, gestational age, parity, marital status, number of pregnancies, smoking status, alcohol intake, and employment status.

For the statistical analysis, the overall prevalence of violence experienced by the women was calculated for the entire sample. Percentages were also calculated to examine violence type (physical or sexual) as well as the perpetrators of the violence. Bivariate demographic differences in experience of violence were assessed using χ^2 analysis. Pearson correlations were then used to examine covariation regarding the reporting of any pregnancy-related symptoms based on demographics. To assess whether experience of violence was significantly associated with increased reporting of pregnancy-related symptoms, while controlling for demographic covariates, 3 separate linear regression models were constructed. Model 1 examined whether an association existed between any violence experienced in the past 6 months and increased distress from pregnancy symptoms. Model 2 examined the relationship between experience of violence and increased distress from pregnancy-related symptoms by perpetrator type. The model included any violence perpetrated by partners and family members/others; this enabled us to examine the effect of any violence from an intimate partner, while controlling for the effect of any violence from family members/others (and vice versa). Model 3 examined the association between type of violence (i.e. physical or sexual) and increased distress from pregnancy-related symptoms. Both physical and sexual violence were simultaneously entered into the model, which enabled us to examine the effect of any physical violence, while controlling for any sexual violence (and vice versa). Multiple linear regression analysis was used because symptom distress was measured as a continuous outcome. Beta coefficients can be interpreted as the average amount that symptom distress increases when violence was experienced in the preceding 6 months (controlling for covariates). All analyses were conducted using SPSS version 11 (SPSS, Chicago, IL, USA).

3. Results

Of 217 eligible women, 200 (92.2%) agreed to participate in the study. Demographic characteristics of the participants are given in Table 1. The mean age of the respondents was 26.8 years, and mean gestational age was 23.6 weeks. Most women (83%) had one or more previous pregnancies. In this sample, 13% of the women were from remote, mountainous regions, while the remainder lived in more populated areas. Only 10% of the women reported that they were employed at the time of the study. Most women were married (89.4%), and few were current smokers (3%) or drank alcohol (4%).

Over 4 in 10 (44.0%) pregnant Haitian women who sought prenatal care at community dispensaries reported that they had experienced some form of violence in the preceding 6 months (Table 1). Specifically, among all women in the study, 39.0% reported experiencing sexual violence, while 8.0% reported experiencing physical violence (categories not mutually exclusive). Slightly over 1 in 3 (34.5%) women had experienced intimate partner violence in the preceding 6 months (77.8% of all women who reported some form of violence), where 34.5% of violence was sexual and 2.5% was physical. One in 8 women (12.5%) reported experiencing violence perpetrated by family members (8% physical, 5.5% sexual). Fewer women (4.0%) reported being attacked by other individuals, with both physical and sexual violence equally prevalent (2.5% physical, 2.5% sexual). No differences in experience of violence were observed based on the demographic characteristics of the study population.

Overall, the mean pregnancy-related symptom distress score was 23.3 ± 9.9. On average, unemployed women were significantly more likely to report greater symptom distress than employed women ($r = -0.015$, $P=0.04$). No other significant demographic differences emerged (Table 2).

The results of multivariable linear regression analysis are shown in Table 3. Compared with women who reported that they had not experienced any violence, women who had experienced violence reported significantly greater pregnancy-related symptom distress ($\beta=0.23$, $P=0.001$). Women who reported experiencing any form of violence perpetrated by their partners (while controlling for any violence from family members/others) reported significantly greater pregnancy-related symptom distress ($\beta=0.23$, $P=0.001$). No significant association between violence perpetrated by family members or others and reporting of symptoms was observed ($\beta=0.06$, $P=0.38$). On average, women who reported experiencing sexual violence (while controlling for physical violence) reported greater pregnancy-related symptom distress ($\beta=0.35$, $P=0.001$). No significant relationship between physical violence and pregnancy-related symptom distress was observed ($\beta=0.063$, $P=0.41$).

4. Discussion

The results showed that 44.4% of pregnant Haitian women had experienced violence in the 6 months preceding interview, with 77.8% of these expectant mothers experiencing abuse perpetrated by an intimate partner. Although empirical studies of violence against pregnant women in Haiti do not exist, our findings are consistent with work on intimate partner violence among broader populations of Haitian women [7,9]. The higher prevalence of intimate partner violence compared with violence from other perpetrators observed in the current study echoes research in other countries [20,21]; this adds to the literature because studies of nonpartner violence against pregnant women in the LAC region are scarce. The high rates of violence against pregnant women documented in the present study, particularly in the context of intimate relationships, strongly suggest the pervasive nature of this gender-

based human rights violation, as well as the vulnerability of these women to potential complications during pregnancy.

Unlike other national studies conducted in Haiti, the women in the present study reported experiencing more sexual violence, both from an intimate partner and overall, than physical violence. Previous national research indicated that physical and sexual intimate partner violence was almost equal [9]. However, the prevalence of sexual violence, both overall (42.5%) and within the context of an intimate relationship (34.5%), is comparable with that documented in other rural, community-based healthcare settings in Haiti [10]. More work is needed to investigate the potential for greater vulnerability in rural settings. Furthermore, the age of the women in the present study was unrelated to their experience of violence, which is similar to the findings of other studies in Haiti [9,10].

The present study found a significant relationship between recent experience of violence (primarily any intimate partner violence) and increased reporting of distress caused by pregnancy-related sypmtoms. This is consistent with the literature that has demonstrated associations between intimate partner violence and morbidity during pregnancy [2,3,22–27]. Notably, although nonpartner violence was not significantly associated with increased reporting of symptoms, over 12% of women in the present study reported violence perpetrated by a nonpartner. The observed, nonsignificant effect may be partially attributable to insufficient statistical power or qualitative differences in experiencing intimate partner violence versus nonpartner violence (e.g. living in a climate of fear with an abusive intimate partner versus one-time attack by a friend or stranger).

Some limitations of the study should be noted. Firstly, we relied on a convenience sample within a prenatal clinic-based setting and the population of pregnant women who present for prenatal care may be distinctively different from those who do not present for such healthcare. Secondly, while poverty is predominant in Haiti and undoubtedly contributes to poor maternal health (e.g. long travel distances to health facilities and insufficient skilled birth attendants in geographically remote areas [7]), we did not specifically examine these issues in the current study. Moreover, as the study was cross-sectional, causality could not be ascertained. Although we assessed exposure to violence in the preceding 6 months, we were unable to determine whether the violence occurred during or in the period prior to pregnancy. Furthermore, we relied on the women self-reporting their experience of violence and, given the stigmatized nature of this assessment, this is likely to have resulted in under-reporting as opposed to over-reporting. Unmeasured confounders may also be present. For example, we did not assess whether pregnancy was intended. Previous research has demonstrated an association between intimate partner violence and unintended pregnancy [28], which in turn has been shown to relate to distress during pregnancy [29]; thus, our estimates may be slightly biased away from the null. Finally, our assessment of the physical symptoms of pregnancy was based on self-reporting and was not verified by clinical data.

Despite these limitations we were able to show that violence against women is pervasive among this sample of pregnant women and violence, particularly perpetrated by an intimate partner, is likely to confer distress from pregnancy-related symptoms. While additional research in Haiti is needed to confirm these findings, some important recommendations can be proposed. Because such a large number of pregnant women who were recruited from community health centers reported recent experiences of violence, the study emphasizes the critical importance of integrating violence screening and intervention into existing prenatal care in Haiti.

In addition, efforts must be implemented to primarily target prevention of violence against women, including research on the perpetrators of violence. Unfortunately, few empirically

informed interventions targeting men's perpetration of violence against their intimate partners currently exist, and such work has yet to be conducted in Haiti. Work in other settings has indicated the importance of traditional masculine ideology [30]; and exposure to other forms of violence, such as political violence [31], has also been associated with perpetration of intimate partner violence. Given Haiti's long history of political instability and violence [11], and the pervasive cultural norms which may support intimate partner violence [32], these factors should also be examined in Haiti.

Our findings indicate the importance of preventing violence against women as a means to help improve women's health during pregnancy. More research is needed to combat this violation of women's rights and improve the health of expectant mothers in Haiti.

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Table 1

Sample characteristics, violence prevalence, and bivariate associations [a]

	No. (%) [b]	Any violence (%)		Any intimate partner violence (%)		Any nonpartner violence (%)	
		Yes	No	Yes	No	Yes	No
Total							
200 [c]		44 (37.0–51.1)	56 (49.1–62.9)	34.5 (26.5–42.3)	65.5 (58.4–71.6)	16.5 (10.9–21.1)	83.5 (77.8–88.2)
Age, y							
Mean		24.6	27.2	26.9	26.8	25.6	27.0
P value (t test)		0.37		0.97		0.31	
14–25 [c]	94 (47.0) (90.7–97.3)	46.8 (36.5–55.5)	53.2 (43.5–62.5)	34.0 (25.0–43.2)	66.0 (57.0–75.0)	14.9 (7.0–21.1)	85.1 (77.8–92.2)
26–45 [c]	106 (53.0) (46.1–59.9)	41.5 (31.6–50.4)	58.5 (48.6–67.4)	34.9 (25.0–43.0)	65.1 (55.9–74.1)	10.4 (4.3–15.7)	89.6 (83.0–95.0)
χ^2 P value		0.45		0.90		0.34	
Gestational age							
Mean		5.9	5.9	5.9	5.9	6.1	5.9
P value (t test)		0.96		0.93		0.63	
1st and 2nd trimester [c]	81 (40.7) (33.7–47.3)	43.2 (32.2–53.8)	56.8 (45.2–66.8)	33.3 (22.8–43.2)	66.7 (55.7–76.3)	13.6 (5.7–20.3)	86.4 (78.4–93.6)
3rd trimester [c]	119 (59.8) (52.7–66.3)	44.5 (35.1–52.9)	55.5 (46.1–63.9)	35.3 (26.4–43.6)	64.7 (55.4–72.6)	11.8 (5.4–16.6)	88.2 (82.2–93.8)
χ^2 P value		0.85		0.78		0.70	
Parity							
Mean		1.8	2.0	1.9	1.9	1.9	1.9
P value (t test)		0.17		0.93		0.97	
0 [c]	34 (17.0) (11.8–22.2)	58.8 (41.4–74.6)	41.2 (24.5–57.5)	41.2 (24.5–57.5)	58.8 (41.4–74.6)	17.6 (4.4–29.6)	82.4 (69.1–94.9)
1 or more [c]	166 (83.0) (77.8–88.2)	41.0 (33.4–48.9)	59.0 (51.5–66.5)	33.1 (26.7–41.8)	66.9 (59.9–74.2)	11.4 (6.7–15.3)	88.6 (83.1–92.9)
χ^2 P value		0.06		0.81		0.32	
Employment status							
Unemployed [c]	178 (89.4) (84.7–93.3)	43.3 (35.7–50.3)	56.7 (49.7–64.3)	34.8 (28.1–42.0)	65.2 (57.9–72.0)	11.8 (7.2–16.8)	88.2 (83.2–93.8)
Employed [c]	21 (10.6) (6.3–14.8)	52.4 (30.6–73.4)	47.6 (25.7–65.4)	33.3 (12.9–53.1)	66.7 (46.9–87.1)	19.0 (2.2–35.8)	81.0 (64.2–97.8)
χ^2 P value		0.63		0.12		0.34	
Marital status							

	No. (%) [b]	Any violence (%)		Any intimate partner violence (%)		Any nonpartner violence (%)	
Total		**Yes**	**No**	**Yes**	**No**	**Yes**	**No**
Married [c]	178 (89.4) (84.7–93.3)	44.9 (37.7–52.3)	55.1 (47.7–62.3)	35.4 (28.0–42.0)	64.6 (57.0–71.1)	12.9 (8.1–17.9)	87.1 (82.1–91.9)
Not Married [c]	21 (10.6) (6.3–14.8)	38.1 (17.2–58.8)	61.9 (41.2–82.8)	28.6 (8.8–47.2)	71.4 (51.6–90.4)	9.5 (2.8–22.8)	90.5 (77.2–102.8)
χ^2 P value		0.55		0.53		0.66	
Current smoking status							
Smoker [c]	6 (3.0) (0.6–5.4)	43.2 (3.4–82.6)	56.8 (17.4–96.6)	34.0 (3.9–71.9)	66.0 (28.1–103.8)	12.4 (–14.0 to 38.0)	87.6 (60.1–113.9)
Nonsmoker [c]	194 (97.0) (94.6–99.4)	66.7 (61.4–74.6)	33.3 (26.4–39.6)	50.0 (27.4–83.7)	50.0 (43.0–57.0)	16.7 (11.7–22.3)	83.3 (77.7–88.3)
χ^2 P value		0.25		0.42		0.75	
Current alcohol use							
Alcohol use [c]	8 (4.0) (1.3–6.7)	44.2 (9.6–78.4)	55.8 (20.5–89.5)	34.4 (1.2–66.8)	65.6 (32.0–98.1)	12.5 (–10.5 to 34.5)	87.5 (63.7–110.3)
No alcohol use [c]	192 (96.0) (93.2–98.7)	50.0 (19.8–32.3)	50.0 (19.8–32.3)	37.5 (30.2–43.8)	62.5 (55.1–68.9)	12.5 (7.4–16.6)	87.5 (82.2–91.8)
χ^2 P value		0.75		0.86		0.99	

[a] Numbers less than 200 are due to missing data.

[b] Column percentages.

[c] Row percentages.

Table 2

Bivariate associations between physical pregnancy-related symptoms and demographic characteristics

	Pregnancy-related symptoms total	
	Pearson Correlation	*P* value
Age, y	0.04	0.59
Number of months pregnant	0.07	0.32
Number of pregnancies	0.01	0.89
Employed	−0.15	0.04 [a]
Marital status	−0.03	0.72
Smoker	0.06	0.41
Use of alcohol	0.08	0.29

[a]$P<0.05$.

Table 3

Results of adjusted multivariable linear regression analysis for physical pregnancy-related symptoms based on exposure to violence (n=196) [a]

	Symptom distress	
	Beta	*t*
Model 1		
Any violence	0.23	3.09 *P*=0.001
Model 2		
Any violence from partners	0.23	3.29 *P*=0.001
Any violence from family/others	0.06	0.87 *P*=0.38
Model 3		
Any sexual violence	0.25	3.64 *P*=0.001
Any physical violence	0.03	0.68 *P*=0.41

[a]Each analysis was done as a separate regression, controlling for demographic variables (age, gestational age, parity, employment status, marital status, current smoker, current alcohol use).