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Prevalence and Correlates of Suicidal Behavior among Adult Female Victims of Intimate Partner Violence

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Abstract

This study examined the prevalence and correlates of suicidal threats and attempts among 662 racially and ethnically diverse adult female victims of intimate partner violence (IPV). One in five women had threatened or attempted suicide during her lifetime. Multiple logistic regression results indicated that women at greater risk of severe or potentially lethal assaults as measured by the Danger Assessment and those who reported having a chronic or disabling illness were more likely to have threatened or attempted suicide. A linear association was found between age and suicide threats/attempts, with younger women having increased odds. Finally, African American IPV victims were less likely to have threatened or attempted suicide as compared to Latina victims. Study implications are discussed.

Suicide is a preventable public health problem (World Health Organization, 2004). The most recent statistics from the Centers for Disease Control indicate that suicide is among the ten leading causes of death among women aged 10 to 54 in the United States (CDC, 2009). Friends and family may develop mental health problems as a result of losing someone to suicide (Cerel, Jordan, & Duberstein, 2008). In addition, a substantial number of women may attempt but not complete suicide and suffer from self-inflicted wounds and enduring health problems. Financial costs of fatal and non-fatal self-inflicted include medical costs and loss of productivity (Corso, Mercy, Simon, Finkelstein, & Miller, 2007).

Women who experience intimate partner violence (IPV), particularly sexual abuse (Coker, et al., 2002), are at risk for suicidal ideation or behavior (Afifi, et al., 2009; Ellsberg, Jansen, Heise, Watts, & Garcia-Moreno, 2008; Golding, 1999; Kaslow, et al., 1998; McFarlane, et al., 2005; Sato-DiLorenzo & Sharps, 2007; Seedat, Stein, & Forde, 2005; Simon, Anderso, Thompson, Crosby, & Sacks, 2002; Weaver, et al., 2007; Wingood, DiClemente, & Raj, 2000). For example, in a national study, heterosexual women who had experienced physical violence by a partner were more than seven times more likely to report current suicidal ideation than their counterparts who had not experienced IPV after controlling for sociodemographic variables, childhood abuse, and psychiatric disorders (Afifi, et al., 2009). Other work suggests that the more severe the IPV, the greater the risk for suicidal ideation or attempts (Coker, et al., 2002; Sato-DiLorenzo & Sharps, 2007). For example, Coker and colleagues (2002) found consecutively stronger associations between psychological, physical, and sexual IPV and women having ever considered or attempted suicide. The

potential lethality of IPV has also been positively associated with women's suicide attempts (Sato-DiLorenzo & Sharps, 2007).

Although the literature suggests that women who experience IPV are at elevated risk for suicidal ideation or suicide attempts and that more severe violence and potential lethality are associated with suicidality, there has been little investigation into other correlates of suicidal behavior among IPV victims. Factors that have been associated with women's suicidal behavior in populations not restricted to IPV victims include chronic disease or disability (Kaplan, McFarland, Huguet, & Newsom, 2007; Ratcliffe, Enns, Belik, & Sareen, 2008) and exposure to suicidal behavior by others (Moscicki, 2001). The latter finding suggests that women with abusive partners who have engaged in suicidal behavior may be at increased risk for suicidal behavior themselves when compared to women whose partners do not have a history of engaging in suicidal behavior. In addition, suicidal behavior has been associated with a number of demographic characteristics including age, race/ethnicity, marital status (Chaudron & Caine, 2004), education, employment, number of children (Kaslow, et al., 2000), and immigration status (Borges, et al., 2009; Kposowa, McElvain, & Breault, 2008). Given the increased risk of suicidal ideation and attempts among female victims of IPV, there is a need for research examining the association between abused women's characteristics and suicidal behavior, as well as their partners' violence and suicidal behavior, to inform suicide prevention interventions with IPV victims. Therefore, this research examines 2 interrelated questions: (1) What is the prevalence of suicide threats or attempts among a diverse sample of adult female victims of IPV? (2) What are the correlates of suicidal behavior in this sample?

Method

Participants and Procedures

This study is a secondary data analysis of the Risk Assessment Validation (RAVE) Study, a study designed to assess the accuracy of four different methods for predicting risk of future harm and lethal assaults of women who had been abused by their intimate partners (Campbell, O'Sullivan, Roehl, & Webster, 2005). The RAVE Study was funded by the National Institute of Justice (NIJ 2000WTVX0011) and approved by the institutional review board of Johns Hopkins University. Female IPV victims who were seeking protective orders against their male partners in family court (n=630), staying in emergency domestic violence shelters (n=177), accessing IPV community services (n=11), or who came to the attention of hospital emergency departments (n=30) in a large urban East Coast City were recruited to participate in this study as were female victims of IPV who called 911 (n=399) or in an emergency domestic violence shelter (n=60) in a large West Coast county. Recruitment and interview procedures varied across sites: Interviewers approached IPV victims at service sites and asked if they would be willing to participate in a research study, agency staff and/or interviewers presented the research to female IPV victims individually and in groups, agency staff referred victims to the research study, flyers with 1-800 numbers were posted in the waiting rooms of some locations, and those identified by a 911 call were contacted by phone. If it was unknown whether the woman was a victim of IPV (those approached in the waiting room of family court, for example), the interviewer used a screening tool to determine whether the woman had experienced IPV within the past 6 months.

In total, 1307 women participated in the baseline interview. This interview was conducted by trained bilingual (English/Spanish) interviewers and took between 35 minutes and 1 hour; 68% of these interviews were completed in person and 32% were completed by phone. Most participants were given \$20 to thank them for their time, though participants interviewed at family courts were given only a \$4 public transportation card at baseline as the court did not permit a monetary incentive. During the baseline assessment, all

participants responded to questions regarding their own and their partners' demographics, their relationship status, their perception of risk of future harm, self-protective measures they had taken and interventions received, and history of abuse by their partner. Each participant was also randomly assigned to receive two risk assessments, one examining risk of lethality and one examining risk of repeat abuse at any level of severity. Of the 1307 women that participated in the baseline assessment, 662 (50.7%) completed the Danger Assessment (DA), which includes a question on the participant's and her partner's suicide threats and attempts. The study reported here utilizes data from the 662 baseline interview participants that completed the Danger Assessment.

Measures

Danger Assessment—The Danger Assessment (Campbell, 2003) was used to assess women's risk of homicide by an intimate partner. The questionnaire consists of 20 items with yes/no response options. The questions inquire about recent increases in the partner's violence, whether he has ever threatened or attempted suicide, and whether she has ever threatened or attempted suicide. The item pertaining to the IPV victim's suicidal behavior is not included in the overall scoring of the DA, but is included so that the risk assessment administrator can intervene if a victim is suicidal. The other nineteen questions are weighted based on their risk severity and summed. An ordinal variable representing a woman's level of danger for being killed by her partner is created based on the scoring procedure. A total score of less than 8 points is designated "variable risk," values between 8 and 13 points are designated "increased risk," values of 14 to 17 are designated "severe danger," and values of 18 or more are designated "extreme danger."

Suicidal behavior—Suicidal behavior was assessed with the question "Have you ever threatened or tried to commit suicide?" Women who reported never having threatened or attempted suicide were coded as '0' and those who reported having threatened or attempted suicide were coded as '1.'

Intimate Partner Violence—Intimate partner violence was assessed using items from the Conflict Tactics Scale-2 (CTS-2) inquiring about physical or sexual IPV (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). The CTS-2 is a questionnaire consisting of 78 items: 39 items ask about perpetration of IPV and 39 items ask about IPV victimization. The primary study from which data were utilized included 19 of the 39 victimization questions. Of the 19 questions, 12 pertained to physical assaults, 3 pertained to sexual abuse, 3 pertained to psychological abuse and one pertained to injury.

Participants were asked to report how many times their intimate partner committed each of these forms of abuse during the previous six months. Response options were rated from '0,' indicating that the partner had not committed this type of abuse in the previous six months, to '4' indicating that he had done it six or more times. There was also a response option indicating that he had not abused her in this way during the previous six months but had before then. For this analysis, these responses were recoded so that a '0' indicated that he had never committed a particular abusive act against her, and '1' indicated he had either in the previous six months or ever in the relationship. Two variables were created to code whether the intimate partner had ever committed physical or sexual abuse against her .IPV.

Physical IPV—The categorical variable representing this partner's physical IPV against her ever was coded so that there were three categories. Women reporting no history of physical violence by their partner were coded as '0.' Women who positively endorsed any of the five minor physical violence items (i.e., partner threw something at them, twisted their arm or hair, pushed or shoved, grabbed them, or slapped them), but none of seven severe

physical violence items were coded as '1.' Last, women endorsing any of the seven severe physical violence items committed by their partner (i.e., used a knife or a gun on her, punched or hit her, choked her, slammed her against a wall, purposefully burned or scalded her, or kicked her) were coded as '2.'

Sexual IPV—The categorical variable representing sexual violence by the partner was coded so that there were also three categories representing women's most severe sexual victimization by their partner. Women reporting no history of sexual violence by their partner were coded as '0.' Women who positively endorsed any of the two minor sexual abuse items (made to have sex without a condom or partner insisted on sex when victim did not want to), but not the one severe sexual IPV item were coded as '1.' Last, women who endorsed the one severe sexual violence item of forcible rape (partner used force to make her have sex) were coded as '2.'

Partner's suicidal behavior—Women were asked if their partner had ever threatened or attempted suicide. Responses of 'no' or 'I don't know' were coded as '0' while 'yes' responses were coded as '1.'

Chronic illness—Women were asked if they have a chronic illness or disabling condition/disease. Those who answered yes were coded as '1' and otherwise '0.'

Demographic Information—A demographic questionnaire was used to obtain information about participants' age, race/ethnicity, employment status, educational history, and marital status. A continuous variable representing participants' age was used in this analysis. Women were also asked to identify their race or ethnicity. From their responses, a categorical variable was created whereby women who identified as Latina/Hispanic were coded as '0,' African Americans were coded as '1,' European descent/White were coded as '2,' and Other was coded as '3.' A categorical variable was also created to represent participants' marital status. Single, married, and separated/divorced were assigned codes 0–2 respectively.

Dichotomous variables for employment, education, and immigration status were created so that 0 was coded as the non-risk category (i.e., employed full-time, part-time, or seasonally; with a high school education or equivalent; and US born) and 1 indicated risk category (i.e., not employed full-time, part time or seasonally; less than a high school education or equivalent, and born outside the United States). Finally, a dichotomous variable was created to identify women without (coded as 0) and with children under 18 living in their household (coded as 1).

Data Analysis

Descriptive statistics and analyses were done using SPSS 17 software (SPSS, 2009). Correlations for continuous and categorical variables were evaluated using the point bi-serial coefficient and associations between two dichotomous variables were determined using the Phi coefficient (see Table 1). Chi square was also used to examine whether there were differences in treatment utilization among female IPV victims with and without a lifetime history of having ever threatened or attempted suicide. Simple logistic regressions were used to test the unadjusted odds of each of the hypothesized correlates being independently associated with women's suicidal behavior. A multiple logistic regression was then used to test the adjusted odds of all twelve hypothesized correlates being simultaneously associated with women's suicidal behavior. Due to missing data, the multiple logistic regression model was conducted on data from 649 of the total 662 participants (less than 2% missing).

Based on the findings of the logistic regression model, four additional logistic regressions were completed as post hoc analyses to evaluate whether chronic disease status was associated with women's use of IPV related services. Multivariate analyses were used to control for associated demographic characteristics including age, race/ethnicity, and employment, immigration, and child status while examining the associations between chronic disease and the following IPV-related service variables: obtaining a protection/restraining order against their partner, receiving services for IPV, being treated by a doctor or nurse for injuries or trauma intentionally caused by their partner, and calling 911.

Results

Sample Demographics

Participants were between 18 and 67 years of age ($M=31.24$; $SD=8.44$). Less than half of the women (44.7%) reported being employed full-time, part-time, or seasonally. The majority of women were Latina/Hispanic (51.7%), African American (28.4%), White (10.6%), and Other (9.4%), born in the U.S. (61.6%), and had children under 18 living in their household (86.2%). Nearly half of the women were single (48.0%), married (40.6%), separated or divorced (11.4%). One hundred forty-four women (22.8%) reported having threatened or attempted suicide during their lifetime.

IPV Related Service Utilization

Female IPV victims who had ever threatened or attempted suicide were also compared to IPV victims who had not ever threatened or attempted suicide with respect to their service utilization (i.e., having sought a temporary restraining order, received DV related services, having been treated by a doctor for IPV injuries, or called 911). IPV victims who had ever threatened or attempted suicide were more likely to have received DV services or been treated by a doctor/nurse for IPV injuries than IPV victims who had never threatened or attempted suicide. No differences were found between IPV victims who had or had not ever threatened or attempted suicide with respect to having sought a temporary restraining order or having called 911.

Unadjusted Logistic Regression Models

The unadjusted and adjusted odds ratios and 95% confidence intervals for the correlates of women's lifetime history of having threatened or attempted suicide are presented in Table 2. As shown, five of the twelve correlates tested were significantly and positively associated with women's lifetime history of suicidal behavior when tested individually. Women who were in the "high danger" or "extreme danger" risk categories of the DA and/or who had been sexually abused or raped by their partners had significantly greater odds of having ever threatened or attempted suicide during their lifetime than women who were in the "variable danger" IPV risk category of the DA or who had not been sexually abused by their partners. Additionally, women who reported having a chronic or disabling illness, those who were not employed, and those who had a partner that had threatened or attempted suicide had significantly greater odds of having threatened or attempted suicide during their lifetime than women who did not report having a chronic or disabling illness, were employed full-time, part-time or seasonally, or did not have a partner who threatened or attempted to kill himself.

Multiple Logistic Regression Model

The twelve variables listed in Table 2 were also tested as correlates of women ever having threatened or attempted suicide in a simultaneous logistic regression. Tolerance values ranged from 0.7 to 0.9 and the variance inflation factor (VIF) values ranged from 1.1 to 1.4,

indicating that there were no violations of multicollinearity (Pallant, 2005). The goodness of fit test was significant [χ^2 (19, N=649) = 67.37, $p < .00$] and the Hosmer-Lemeshow Test was not significant, indicating that the model fit the data well. In addition, the Cox and Snell R^2 indicated that between 9.9 and 15.2% of the variability is explained by the correlates tested. In the multiple or adjusted logistic regression model, four correlates were significantly associated with women's lifetime history of having threatened or attempted suicide: her DA category, chronic or disabling disease status, age, and race/ethnicity. Women in the "high danger" or "extreme danger" risk categories of the DA had, respectively, 2.8 and 3.7 times greater odds respectively of having ever threatened or attempted suicide than women in the "variable danger" risk assessment category after controlling for other variables in the model. Additionally, women who reported having a chronic or disabling disease had 2.4 times greater odds of having ever threatened or attempted suicide than women who did not have a chronic or disabling disease after controlling for other variables. Women who were younger were also significantly more likely to have threatened or attempted suicide (AOR=0.97, $p < .05$, 95% CI=0.942–0.997; data rounded up in Table 2) after controlling for other variables. Finally, African American victims were 40% less likely than Latinas to have threatened or attempted suicide.

Discussion

Although suicide is one of the leading causes of death among women in the United States (CDC, 2009), there has been a paucity of research examining the prevalence and correlates of suicidal behavior among female victims of IPV, despite evidence that this population is at elevated risk for having suicidal ideation or making suicide attempts (Afifi, et al., 2009; Ellsberg, et al., 2008; Golding, 1999; Kaslow, et al., 1998; McFarlane, et al., 2005; Sato-DiLorenzo & Sharps, 2007; Seedat, et al., 2005; Simon, et al., 2002; Weaver, et al., 2007; Wingood, et al., 2000). This study addressed a gap in the literature by examining the prevalence and correlates of suicidal behavior among a racially and ethnically diverse sample of adult female victims of IPV. Study findings suggest that one in five adult female victims of IPV in this study have threatened or attempted suicide during their lifetime. In addition, a number of correlates of women's lifetime suicidal behavior were tested, including risk of lethal assault as measured by the DA, severity of physical abuse by their intimate partner, severity of sexual abuse by their intimate partner, their partner's suicidal behavior, their own chronic/disabling disease status, and demographic characteristics that have been previously found to influence suicide risk. Results from the multiple logistic regression indicated that women who are at higher risk of potentially lethal assaults by their intimate partner had significantly greater odds of having threatened or attempted suicide during their lifetime. These results are consistent with previous findings that have documented associations between potential lethality of IPV and suicidal behavior (Sato-DiLorenzo & Sharps, 2007). Severe abuse by an intimate partner and his dangerousness may lead to suicide threats or attempts directly or indirectly. Victims of IPV who fear for their lives may see suicide as a way to exert control over an otherwise uncontrollably volatile situation. Indirectly, greater danger in a violent intimate relationship is likely to have a more acute impact on mental health in the form of Post Traumatic Stress Disorder (PTSD), anxiety and depression (Hedtke, et al., 2008; Johnson, Delahanty, & Pinna, 2008; O'Campo, et al., 2006; Wilcox, Storr, & Breslau, 2009). These mental health effects of chronic and severe violence are, in turn, risk factors for suicidal ideation (Johnson, et al., 2008; Katz, Snetter, Robinson, Hewitt, & Cojucar, 2008; Taft, Schumm, Marshall, Panuzio, & Holtzworth-Munroe, 2008; World Health Organization, 2002). Additional research should examine the pathways from higher risk of potentially lethal IPV experiencing severe IPV and fearing homicidal partners to suicidal behaviors, paying special attention to potential mediating effects of mental health.

Female IPV victims who identified as having a chronic or disabling disease had significantly greater odds of having threatened or attempted suicide during their lifetime. To our knowledge, this is the first study to investigate and document a relationship between chronic or disabling disease status and suicidal behavior among adult female victims of IPV, although this relationship has been documented in non-abused samples (Kaplan, et al., 2007; Ratcliffe, et al., 2008). One possible explanation for this association is that abused women with chronic or disabling conditions may be more severely abused by their partners and thus be at greater risk for suicidal behavior. The correlation matrix shows that women's chronic or disability status was significantly associated with being in the extreme risk category on the DA and experiencing more severe sexual violence, but does not show a significant association between chronic disease status and experiencing physical abuse. Having a chronic disease remained a significant correlate of women's suicidal behavior even after controlling for the severity of physical and sexual violence and potentially lethal assaults. Thus, it is likely that chronic illness has its own effects on suicidality outside of the association that IPV has on chronic illness.

In addition to physical and sexual violence, a common feature of IPV is an abusive partner's controlling behaviors. Women who have a chronic or disabling disease may be more likely to be socially isolated and controlled by their partners, and may have more difficulty leaving the relationship or accessing IPV services. Thus trapped, victims of IPV with chronic disease or disability may believe suicide to be their only escape. Given the available data, we examined whether women with chronic or disabling conditions were less likely than abused women without chronic or disabling conditions to seek help for IPV in the following ways: (1) by trying to get a protection/restraining order against their partner, (2) receiving IPV services, (3) receiving treatment by a doctor or nurse for injuries or trauma caused in their relationship, or (4) by calling 911 because of IPV with their partner. After controlling for demographic variables including age, race/ethnicity, employment, immigration, and child status, results from four logistic regression models indicated that women with chronic or disabling diseases were more, not less, likely to have tried to get a restraining or protective order, received IPV services, or been treated for injuries inflicted by their partner than abused women without chronic or disabling diseases. There was no association between chronic or disabling disease status and women's history of calling 911 because of their partner's abuse. More research is needed to better understand suicidality among abused women with chronic and disabling diseases in order to better understand how to reduce suicidality in this population of women.

Also novel in this study was the examination of whether abused women's partners' suicidal behavior was associated with their own suicidal behavior. The bivariate finding that abused women whose partners had threatened or attempted suicide were more likely to have threatened or attempted suicide than abused women whose partners had not threatened or attempted suicide is consistent with literature that suggests that suicidal behavior may be influenced by suicidal behavior of others (Moscicki, 2001). This association was not significant after controlling for other factors in the multiple logistic regression model, however. Finally, although seven demographic characteristics were tested as correlates of abused women's suicidal behavior, only age and race/ethnicity were associated with abused women's suicidal behavior in the multiple logistic regression model. Findings suggest that younger women were more likely to have threatened or attempted suicide. Consistent with research on completed suicides in the U.S. (American Association of Suicidality [AAS], 2008), African American women in this sample were less likely than Latinas to have threatened or attempted suicide. These findings add to a nascent literature pertaining to correlates of suicidal behavior among abused women that may inform suicide prevention interventions.

Findings from this study should be considered in light of study limitations. Of note is that our variable assessing suicidal behavior treated suicide threats and suicide attempts as unitary. Future research should examine these variables separately in order to distinguish potentially unique factors associated with these two different behaviors. Ideally, the severity of suicidal behaviors would also be tested. This study was cross sectional and thus conclusions regarding the chronology of study variables cannot be drawn; that is, it is unknown whether the women's suicide threats or attempts were made prior to the partner's abuse or whether the abuse preceded the suicidal behaviors.

Given that nearly one in five abused women in this study reported having threatened or attempted suicide, addressing suicidality in this population of women is a priority in order to prevent these women from taking their own lives. Though the most effective intervention for reducing suicidality for this population may be to eliminate IPV, interventions that focus on crisis intervention and safety among abused women, particularly among those who report more severe and potentially lethal IPV and/or with a chronic or disabling disease, are needed because these women are not only at risk for their partners murdering them, but they may also be at risk for suicide to escape the abuse. Furthermore, since IPV, particularly severe IPV, places women at risk for developing mental health problems, and mental health problems are in turn associated with suicidality, interventions that address the mental health needs of abuse women may also indirectly reduce suicidality in this population of women.

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Table 1

Variable prevalence (or mean) and correlations

Variable	n(%) / M	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Victim Suicidality	144 (21.8)	--												
IPV Risk Variables														
2. DA: Extreme Danger	263 (39.7)	.21*	--											
3. Severe physical IPV	559 (84.4)	.07	.29*	--										
4. Severe Sexual IPV	184 (28.0)	.16*	.41*	.29*	--									
Other Risk Variables														
5. Partner Suicide Behavior	203 (30.7)	.12*	.33*	.10	.16*	--								
6. Victim Chronic Illness	107 (16.2)	.17*	.17*	.08	.12+	.02	--							
Victim Demographics														
7. Age	31.24	-.03	-.08	-.04	.03	-.05	.19*	--						
8. Race/Ethnicity: Latina	342 (51.7)	.11	.19*	.14+	.13	.09	.12+	.04	--					
9. Marital Status: Single	317 (48.0)	.07	.18*	.12~	.04	.02	.09	.38*	.12	--				
10. Not Employed	365 (55.3)	.10+	.14*	.09~	.03	-.02	.12*	.12*	.04	.13+	--			
11. < High School/Equiv.	218 (33.0)	.04	.05	.06	.05	.04	-.01	-.01	.18*	.07	.21*	--		
12. Foreign Born	254 (38.4)	.02	.14*	.04	.10+	-.10+	-.07+	.20*	.24*	.29*	-.07	.10+	--	
13. Has Child/Children	569 (86.2)	-.03	.06	.07	.02	.07	-.19*	.26*	.14*	.06	.02	.02	.00	--

* $p < .01$;+ $p < .05$;~ $p < .10$

Table 2

Logistic regression models testing correlates of women's suicide behavior

Variables (Ref. = Reference Category)	n(%) of 144 women with suicide behaviors	Unadjusted		Adjusted	
		Odds Ratio	95% Confidence Interval	Odds Ratio	95% Confidence Interval
DA Score: Variable Risk (Ref.)	9 (6.3)	1.0	--	1.0	--
Elevated danger	26 (18.1)	2.0~	0.9–4.4	1.9	0.8–4.4
High danger	27 (18.8)	3.1+	1.4–6.9	2.8+	1.2–6.7
Extreme danger	82 (56.9)	4.9*	2.4–10.2	3.7*	1.6–8.6
Physical IPV: None (Ref.)	7 (4.9)	1.0	--	1.0	--
Minor	9 (6.3)	0.6	0.2–1.8	0.6	0.2–2.0
Severe	128 (88.9)	1.2	0.5–2.8	0.7	0.3–1.7
Sexual IPV: None (Ref.)	38 (26.4)	1.0	--	1.0	--
Minor	50 (34.7)	1.9+	1.2–3.0	1.3	0.7–2.1
Severe	56 (38.9)	2.6*	1.6–4.1	1.5	0.9–2.7
Partner's Suicidal Behavior: No No History (Ref.)	77 (56.6)	1.0	--	1.0	--
Positive History	59 (43.4)	1.8*	1.2–2.6	1.2	0.8–1.9
Victim Chronic Illness: No (Ref.)	103 (72.0)	1.0	--	1.0	--
Yes	40 (28.0)	2.6*	1.7–4.1	2.4*	1.4–3.9
Age	--	1.0	1.0–1.0	1.0 ^{a+}	0.9–1.0
Race/Ethnicity: Latina (Ref.)	73 (50.7)	1.0	--	1.0	--
African American	32 (22.2)	0.8	.5–1.2	0.6+	0.3–1.0
White	20 (13.9)	1.5	0.8–2.6	1.2	0.6–2.3
Other	19 (13.2)	1.6	0.9–3.0	1.6	0.8–3.0
Marital Status: Single (Ref.)	59 (41.5)	1.0	--	1.0	--
Married	63 (44.4)	1.3	0.9–2.0	1.6~	1.0–2.6
Separated/Divorced	20 (14.1)	1.6	0.9–2.9	1.9~	0.9–3.7
Employment Status: Full-time/ Part-time/seasonal (Ref.)	50 (35.0)	1.0	--	1.0	--

Variables (Ref. = Reference Category)	n(%) of 144 women with suicide behaviors	Unadjusted		Adjusted	
		Odds Ratio	95% Confidence Interval	Odds Ratio	95% Confidence Interval
Not full-time/part-time/seasonal	93 (65.0)	1.7 ⁺	1.1–2.5	1.5 [~]	1.0–2.2
Education: At least high school/ equivalent	92 (63.9)	1.0	--	1.0	--
Less than high school/equiv.	52 (36.1)	1.2	0.8–1.8	1.1	0.7–1.7
Foreign Born: No (Ref.)	86 (59.7)	1.0	--	1.0	--
Yes	58 (40.3)	1.1	0.8–1.6	1.2	0.8–1.9
Child Status: No Children (Ref.)	23 (16.0)	1.0	--	1.0	--
Has children	121 (84.0)	0.8	0.5–1.3	0.7	0.4–1.3

* $p < .01$;

+ $p < .05$;

~ $p < .10$;

^a CI=0.942–0.997-rounded up.