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Violence Against Women and Postpartum Depression: The Experience of Chilean Women

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This article is based on the findings from a cross-sectional study of women (N = 163) who were at least two weeks postpartum and attending primary care clinics in Arica, Chile. The researcher in this study examined the prevalence of history of violence and its association with postpartum depression. The Women Abuse Screen and the Postpartum Depression Screening Scale–Spanish version were used to assess interpersonal violence and postpartum depression. A history of violence was reported by 64% of the women. Of those who experienced abuse, 44% reported ongoing abuse during their pregnancy. Women who experienced violence screened positive for elevated symptoms categories of postpartum depression such as anxiety/insecurity, emotional lability, and mental confusion compared to women who had not experienced violence. Postpartum depression symptom reporting decreased with increasing number of pregnancies (OR = 0.70, 95% CI 0.54–0.97) and greater social support (OR = 0.64, 95% CI 0.46–0.88). Postpartum depression symptom reporting increased with smoking (OR = 1.71, 95% CI 1.00–2.86), and with reporting history of violence (OR =

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1.79, 95% CI 1.24–2.34). Acknowledgment of the strong association between domestic violence and postpartum depression should lead to routine screening during prenatal and postpartum periods as a way to isolate risk for postpartum depression.

KEYWORDS violence against women, postpartum depression, Chilean women

INTRODUCTION

Violence against women (VAW) is an unfortunate fact of life for millions of women around the world (Kendall–Tackett, 2007). Many researchers have described the impact of violence, and particularly intimate partner violence (IPV), on women's physical and mental health (Jordan, Campbell, & Follingstad, 2010; Kendall–Tackett, 2007; Pico–Alfonso et al., 2006; Romito, Turan, & De Marchi, 2005; Temple, Weston, & Marshall, 2005). Pregnancy does not protect women from violence (Devries et al., 2010; Kendall–Tackett, 2007); in fact, the World Health Organization (WHO) has defined violence as one of the greatest risks for women of reproductive age (WHO, 2005; Garcia–Moreno & Watts, 2011).

Chile has a high level of IPV. The National Women Service of Chile (SERNAM, 2011) reported that at least one woman per week is killed by her current or previous partner, and that 35.7% of Chilean women have self-reported an IPV experience during their lifetimes. Nevertheless, this rate may be underestimated because women who have been victimized find it hard to disclose their experiences and seek help; VAW is seldom reported and kept within the boundary of the home (Flury, Nyberg, & Riecher–Rossier, 2010; Keeling & Mason, 2011). In a multi-country study, Chile had the highest reported lifetime prevalence of severe psychological violence (Ramiro, Hassan, & Peedicayil, 2004). Psychological violence during pregnancy by an intimate partner is strongly associated with postpartum depression (PPD), independent of physical or sexual violence (Ludermir et al., 2010; Romito et al., 2009).

The impact of any type of violence is strongly associated with nonorganic mental distress and disorder, including PPD (Beydoun et al., 2010; Certain et al., 2008; Garabedian et al., 2011; Hayes et al., 2010; Jordan, Campbell, & Follingstad, 2010; Kendall–Tackett, 2007; Lancaster et al., 2010; Silverman & Loudon, 2010). Poo et al. (2008) reported a prevalence of 50.7% for PPD in a group of Chilean women 40 to 45 days after delivery; a history of violence and a poor relationship with the partner were significantly associated with PPD. PPD can be devastating, not only for the mother who is suffering with this psychological problem, but can also interfere in the newborn's development and with family functioning (Beck, 2008b; Deave et al., 2008; Field, 2010; Kendall–Tackett, 2010; Shay–Zapien & Bullock, 2010).

During the last decade, the Chilean government established policies about the management of domestic violence (National Library of Congress of Chile, 2005). However, routinely screening for violence in Chile is not yet implemented in every health facility (Health Ministry of Chile, 2008). Previous studies have suggested the need for violence screening for all women (Bunn et al., 2009; Gracia & Lila, 2008; Onifade et al., 2010; O'Reilly, Beale, & Gillies, 2010). Prenatal and postpartum periods provide an opportunity for clinicians to develop a trusting relationship with the mother, which may facilitate disclosure of IPV (Bunn et al., 2009; Gracia & Lila, 2008; Onifade et al., 2010; O'Reilly et al., 2010).

The purpose of the researcher in this study was to describe the prevalence of violence and its associations with symptoms of PPD in postpartum women receiving routine clinical care in Arica, Chile. The hypothesis was that Chilean women with history of VAW would be more likely to report symptoms of PPD, compared to women with no history of VAW. The associations of specific types of violence and socio-demographic factors with PPD were explored.

METHODS

Data for this cross-sectional study were part of a larger research protocol, "Postpartum Depression in Women from Arica, Chile." The sample size required ($N = 193$) was calculated for correlational analysis (power 0.80, $r = 0.2$, alpha 0.05) using the G*Power, version 3.1 statistical program (Faul, Erdfelder, Buchner, & Lang, 2009). Given difficulties in recruiting a sufficient number of eligible women, researchers were only able to recruit 163 participants. While it is not statistically valid to recalculate power (post-hoc power analysis) after the data are already collected (Hoening & Heisey, 2001), Cohen (1988) has indicated a correlation of 0.3 constitutes a medium effect size, suggesting that this may have been a more appropriate effect size for our initial power analysis during the planning stage. With a sample size of 163, the power to detect a correlation as small as 0.2 was only 73% with alpha = 0.05. Women were considered eligible if they were 18 years of age or older, had delivered a singleton full-term baby, were two to six weeks postpartum, and were seeking health care for their infant at one of three primary health clinics in Arica, Chile. Of all of the patients screened during the recruitment period, 25% were eligible based on these criteria. Potential participants were selected from the daily public health clinic list of patients with appointment for routine child care exam. Women were approached and screened by study personnel in the reception area of the public health clinic while waiting for their children to be examined; screening for eligibility was accomplished using a checklist that contained each criterion. Ninety-nine percent of the eligible women agreed to participate and gave written and

signed informed consent. Those who declined to participate indicated that they did not have time to stay for the interview.

Instruments

The Women Abuse Screen (WAS; Champion et al., 2004) was used to assess history of violence among women. This nine-item questionnaire measures experiences of violence in a woman's current or past relationships, and addresses psychological, physical, and sexual abuse. The answers are dichotomous with *yes* = 1 and *no* = 0. The maximum score is nine, which indicates a high level of exposure to violence. This questionnaire does not measure severity of the violence, as severity could be subjective. One advantage of using the WAS is that it identifies the perpetrator of violence, and whether the episode of violence was recent or in the past. The questionnaire had been tested previously in English-speaking population with reported reliability of 0.78 to 0.82 (Champion et al., 2004; Champion et al., 2005; Thurman et al., 2008); and with Spanish-speaking women with reliability of 0.89 (Quelopana, Champion, & Salazar, 2008). The overall Cronbach's alpha for this sample was 0.69.

The Postpartum Depression Screening Scale (PDSS)–Spanish version (Beck & Gable, 2003, 2005) was used to measure PPD symptoms. The PDSS–Spanish version (Western Psychological Service, Los Angeles, California) is a 35-item Likert-type, self-report scale. Women were asked to indicate their degree of disagreement or agreement with each item from 1 (*strongly disagree*) to 5 (*strongly agree*). The PDSS provides an overall score for PPD, with a total score ranging from 35 to 175. Cutoff scores for the PDSS–Spanish version were dichotomized into two categories: normal adjustment (scores $\leq$59) and significant symptoms of PPD (scores $\geq$60) (Beck & Gable, 2005). The PDSS is multidimensional with seven subscales including: sleeping/eating disturbance, anxiety/insecurity, emotional lability, mental confusion, loss of self, guilt/shame, and suicidal thoughts (Beck & Gable, 2002). Each subscale consists of five items and has a cutoff point to help clinicians determine which symptom category the client is struggling with, and the need for intervention or referral to a specialist (Beck & Gable, 2002). The reliability coefficients (Cronbach's alpha) obtained for the subscales in this sample of Chilean women were: sleeping/eating disturbance 0.75, anxiety/insecurity 0.68, emotional lability 0.79, mental confusion 0.80, loss of self 0.80, guilt/shame 0.83, and suicidal thoughts 0.86 (Table 1). The overall alpha of the PDSS–Spanish version in this sample was 0.95. The process of validation for this instrument for the Chilean population, including the Inconsistent Responding Index, has been described extensively in a previous publication (Quelopana & Champion, 2010).

A portion of the questionnaire "Barriers, Motivators, and Facilitators of Prenatal Care Utilization" (BMFPNC; Johnson et al., 2003) was used to assess

TABLE 1 Symptoms of PPD in a Sample of Chilean Women ($N = 163$)

Dimension	Cutoff score*	With symptoms of PPD	Without symptoms of PPD
Sleeping/eating disturbances	≥17	41 (25%)	122 (75%)
Anxiety/insecurity	≥15	36 (22%)	127 (78%)
Emotional lability	≥16	39 (24%)	124 (76%)
Mental confusion	≥13	19 (12%)	144 (88%)
Loss of self	≥11	30 (18%)	133 (82%)
Guilt/shame	≥11	26 (16%)	137 (84%)
Suicidal thoughts	≥6	53 (32%)	110 (68%)
Total score PDSS–Spanish version	≥60	73 (45%)	90 (55%)

*Cutoff score of significant symptoms for the PDSS–Spanish version (Beck & Gable, 2005).

demographics characteristics, reproductive history, attitude toward last pregnancy, use of drugs and alcohol, history of depression, social support, and newborn feeding methods.

Procedure

This study protocol was approved by the Medical Institutional Research Board of University of Kentucky and the Research Office of the Universidad de Tarapaca, Arica, Chile. Data were obtained using a structured interview administered by two midwives in a private area of the clinic following the completion of the child's visit. Participants were assured that decisions concerning participation in the study would not change the health care they received at the clinic. Participants were told they could withdraw from the study at any time.

Women were protected from harm by assuring a private interview in the absence of partners or other adult family members. Women who reported an experience of domestic violence were counseled and offered referrals to social and psychological services of their primary health clinic. Participants who scored ≥60 on the PDSS were referred to the mental health department at the health center for psychological follow-up. Data were treated with strict confidentiality in congruence with the "Chilean human scientific research regulations" (Health Ministry of Chile, 2006).

Statistical Analyses

Data were analyzed using SPSS, Version 17. The women were divided into groups based on self-reported experience of violence. Descriptive statistics and chi-square analyses were conducted to compare women with self-reported history of violence to those without self-reported history of violence. Odds ratios and 95% confidence intervals (*CI*) were calculated for factors significantly associated to history of violence. A backward logistic

regression analysis, with the probability for stepwise removal of 0.10, and controlling for socio-demographic variables was used to identify factors significantly associated with positive screen for elevated symptoms of PPD.

FINDINGS

Sample Characteristics

Women's ages ranged from 18 to 43 ($SD \pm 6.5$) years. No significant differences were found between abused (reported history of violence) and non-abused (no reported history of violence) women by whether they were living with a partner, their educational level, number of persons living at home, and employment (Table 2). More abused than non-abused women reported a monthly household income of less than 150,000 Chilean pesos ($320 USD) ($p < 0.05$). Reproductive characteristics and breastfeeding were not associated with history of violence. A greater proportion of women with history of violence reported a history of smoking and of drinking alcohol ($p < 0.05$).

Unadjusted Results

VAW was reported by 64% of the women; 61% reported psychological abuse, 33% physical, and 10% sexual abuse. Individual item responses for psychological, physical, and sexual abuse included: "Has anyone ever: (a) constantly criticized you or put you down?" (47%); (b) "made you feel afraid to say what you think?" (33%); (c) "tried to force you into doing something you didn't want to do by threatening to hurt you?" (9%); (d) "acted with extreme jealousy like he's your owner?" (18%); (e) "used a knife, gun, or other weapon against you?" (6%); (f) "forcefully held you down, punched, kicked, or tried to choke you?" (23%); (g) "had sex with you when you didn't want to?" (6%); (h) "hurt you physically when you were having sex?" (3%); and (i) "made you feel afraid to say no to sex?" (6%). The most frequently reported perpetrator of psychological violence was the woman's current partner (35%); the most frequently reported perpetrator of physical and sexual violence was the previous partner (40% and 52%, respectively). Of women reporting abuse, 44% described an abusive relationship during the last pregnancy. Only 19% of women with an experience of violence reported seeking counseling, social services, or other resources for women experiencing violence.

In unadjusted analyses, history of violence was significantly associated with negative attitude toward the last pregnancy (Table 3). The BMFPNC assessed social support. Researchers compared women with and those without history of violence for reported social support as identified through the following five questions: (1) "Did someone encourage you to seek health care?" (23% vs. 19%); (2) "Did you get help with house chores?" (64% vs.

TABLE 2 Socio-Demographic and Reproductive Characteristics of the Women by History of Violence ($N = 163$)

Characteristic	History of violence	
	Yes ($n = 105$) *n* (%)	No ($n = 58$) *n* (%)
Live with partner		
Yes	69 (66)	42 (72)
No	36 (34)	16 (28)
Education level		
Less than high school	31 (30)	13 (22)
High school or more	74 (70)	45 (78)
Number of people living at home		
≤5	55 (52)	33 (57)
>5	50 (48)	25 (43)
Employed		
Yes	21 (20)	15 (26)
No	84 (80)	43 (74)
Monthly income*		
≤$150,000 Chilean pesos (≤300 USD)	57 (54)	19 (33)
>$150,000 Chilean pesos (>300 USD)	41 (39)	35 (60)
Do not know	7 (7)	4 (7)
Parity		
Primipara	44 (42)	18 (31)
Multiparous	61 (58)	40 (69)
Initiation prenatal care		
Early: ≤12 weeks	86 (82)	44 (76)
Late: >12 weeks	19 (18)	14 (24)
Type of delivery		
Vaginal	66 (63)	38 (66)
Cesarean	39 (37)	20 (34)
Breastfeeding		
Yes	78 (74)	38 (66)
No	27 (26)	20 (34)
History of smoking*		
Yes	67 (64)	27 (47)
No	38 (36)	31 (53)
History of drinking alcohol*		
Yes	73 (70)	31 (53)
No	32 (30)	27 (47)

*$p < 0.05$.

72%); (3) "Did you get help with child care?" (71% vs. 74%); (4) "Do you have anyone to help you in case of economic problems?" (77% vs. 86%); and (5) "Do you have anyone to turn to in case of emotional need?" (65% vs. 91%). The only social support item significantly negatively associated with violence was having someone to turn to in case of emotional need ($X^2 = 13.83$, $OR = 0.17$, *95% CI* = 0.06–0.47).

Significant symptoms of PPD (scores ≥60 in the PDSS) were reported by 45% of women. Of women who had a positive screen for elevated PPD symptoms, 84% described experiencing violence in their lifetimes, and 48%

TABLE 3 Relationship Between History of Violence and Attitudes Toward Pregnancy, Unadjusted Results ($N = 163$)

Attitude toward pregnancy	History of violence: Yes ($n = 105$) n (%)	History of violence: No ($n = 58$) n (%)	X^2	OR	95% CI
Did you want people to know you were pregnant?*					
Yes	75 (71)	53 (91)	8.82	4.2	1.54–11.64
No	30 (29)	5 (9)			
Was the pregnancy unintended?					
Yes	63 (60)	30 (52)	1.04	1.40	0.73–2.67
No	42 (40)	28 (48)			
Were you unhappy about being pregnant?*					
Yes	21 (20)	4 (7)	4.94	3.37	1.09–10.37
No	84 (80)	54 (93)			
Did you consider having an abortion?*					
Yes	18 (17)	0 (0)	11.17	1.20	1.10–1.31
No	87 (83)	58 (100)			

*$p < 0.01$.

reported being in an abusive relationship. Of women who were living in an abusive relationship, 98% reported psychological violence, 25% physical abuse, and 2% sexual abuse. A positive screen for elevated PPD symptoms was significantly associated with a history of violence in unadjusted analyses ($X^2 = 21.14$, $OR = 5.31$, *95% CI* = 2.52–11.18). A positive relationship was observed between all types of violence and positive screen for elevated symptoms of PPD (Table 4). The symptom category that had the strongest relationship with psychological violence was "anxiety/insecurity." Physical violence correlated most strongly with "emotional liability." Sexual violence was most strongly associated with "loss of self."

Adjusted Results

A backward (Wald) logistic regression analysis controlling forsocio-demographic variables was used to identify factors independently associated with increased positive screen for elevated symptoms of PPD. Five variables previously significant in the crosstab analysis were included in the final model. Variables significantly associated with positive PPD symptomatology included: number of pregnancies, social support (compound variable of five questions), history of violence, and smoking (Table 5). The model was significant ($X^2 = 36.15$, $p < 0.001$), with a 72% overall rate of correct classification. PPD symptom reporting decreased with increasing number of pregnancies ($OR = 0.70$, $CI = 0.52$–0.95) and greater social support ($OR =$

TABLE 4 Intercorrelations Among Type of Violence and Dimensions of Symptoms of PPD ($N = 163$)

Variables	1	2	3	4	5	6	7	8	9	10	11
Type of violence											
1. Psychological violence	–										
2. Physical violence	0.35**	–									
3. Sexual violence	0.19*	0.19*	–								
4. Total violence	0.85**	0.61**	0.39**	–							
Dimension of PPD symptoms											
5. Sleeping/eating disturbance	0.27**	0.17*	0.15	0.28**	–						
6. Anxiety/insecurity	0.41**	0.24**	0.24**	0.42**	0.57**	–					
7. Emotional lability	0.37**	0.35**	0.22**	0.42**	0.53**	0.76**	–				
8. Mental confusion	0.31**	0.26**	0.26**	0.37**	0.47**	0.61**	0.64**	–			
9. Loss of self	0.30**	0.30**	0.33**	0.41**	0.24**	0.67**	0.66**	0.74**	–		
10. Guilt/shame	0.27**	0.27**	0.19*	0.34**	0.39**	0.59**	0.70**	0.70**	0.73**	–	
11. Suicidal thoughts	0.21**	0.22**	0.17*	0.29**	0.31**	0.47**	0.48**	0.65**	0.64**	0.62**	–
12. Total score PDSS	0.27**	0.17*	0.15	0.46**	0.71**	0.86**	0.88**	0.82**	0.79**	0.79**	0.63**

*$p < 0.05$.
**$p < 0.01$.

TABLE 5 Final Logistic Regression Model (*Backward*) of Screening Elevated Symptoms of PPD on the PDSS–Spanish Version, Controlling by Socio-Demographics Characteristics (N = 163)

Variable	B^a	Wald	*OR*	95% *CI*
Number of pregnancies	−0.35	5.38	0.70	0.52−0.95
Social support	−0.44	7.40	0.64	0.47−0.88
History of smoking	0.53	4.01	1.71	1.01−2.89
History of violence	0.58	13.95	1.79	1.32−2.42
Constant	0.34	0.17		
−2Loglikelihood	188.04			
Model X^2 (df = 6)	36.15			
p	< 0.001			
Overall rate of correct classification	72%			

[a]Unstandardized coefficient.

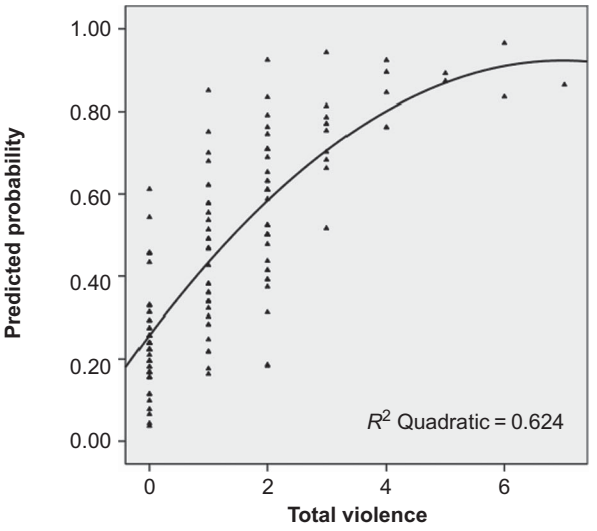

FIGURE 1 Probability of screening positive on the PDSS–Spanish version by reported history of violence.

0.64, *CI* = 0.47–0.88), and increased with history of smoking or smoking during pregnancy (*OR* 1.71, *CI* = 1.01–2.89) and with reporting history of violence (*OR* 1.79, *CI* = 1.32–2.42). The Hosmer–Lemeshow Test Goodness of Fit (X^2 = 5.79, df = 8, p = 0.67) indicated a good fit of the logistic model. The strongest association with a positive screen for elevated PPD symptoms in the PDSS–Spanish version was reporting history of violence (Figure 1).

DISCUSSION

Reported history of violence in this study was higher (64%) than the rate reported by the Chilean government (35.7%; SERNAM, 2011). Other researchers have reported a lifetime experience with violence of 42.2% in a sample of 256 pregnant women attending a health clinic in a southern city of Chile (Crempien et al., 2011). These differences in the prevalence of a history of violence between research and government statistics are not surprising. Women who have been victimized find it hard to disclose their experiences and seek help (Flury, Nyberg, & Riecher–Rossier, 2010; Keeling & Mason, 2011). Many researchers have acknowledged the importance of routinely screening as a way to increase detection of violence (Bunn et al., 2009; Gracia & Lila, 2008; Onifade et al., 2010; O'Reilly et al., 2010; Shay–Zapien & Bullock, 2010). Health professionals play an important role in detection and prevention of violence (Gracia & Lila, 2008; Quelopana et al., 2008; WHO, 2005). In fact, during this study many women reported a previously unreported experience of violence, providing evidence of the importance of using a postpartum visit as an opportunity to screen for violence.

Of the three types of violence assessed, psychological violence had the highest prevalence (61%) in this sample of women. Of all of the forms of VAW, psychological abuse is the most difficult to validate and reliably define (Follingstad, 2009). Nevertheless, psychological aggression is a major contributor to depression (Jordan et al., 2010).

Psychological abuse during pregnancy is strongly associated with depressive symptoms, including PPD (Crempien et al., 2011; Illanes et al., 2007; Ludermir et al., 2010; Romito et al., 2009; Vizcarra et al., 2004). Anxiety/insecurity was the symptom category of PPD most strongly associated with psychological violence; Beck and Gable (2002) mentioned that an elevated level of *anxiety/insecurity* reflects feelings of being overwhelmed and isolated in the role of motherhood. Women with psychological violence in this study had also reported elevated symptom categories of sleeping/eating disturbance, emotional lability, mental confusion, loss of self, guilt/shame, and suicidal thoughts. The WHO multi-country study found strong associations of emotional distress and suicidal thoughts with partner violence (Devries et al., 2011; Ellsberg et al., 2008). In this sample of Chilean women, researchers also found that physical and sexual violence were strongly associated with elevated symptoms of PPD.

Negative feelings about the last pregnancy were associated with reporting violence. More women who had been abused than those who had not been abused did not want people to know about their pregnancy, felt unhappy about being pregnant, and considered having an abortion. Women with experience of violence have reported significant levels of pregnancy coercion and birth control sabotage (Miller et al., 2010). In a qualitative approach, Williams and Brackley (2009) described that women's decisions

to terminate pregnancy were related to the violence in their lives. In the current study, VAW prior to or during pregnancy were associated with negative feelings during pregnancy that contributed to depressive symptoms during the postpartum period. The assumption may be made that these negative feelings during pregnancy remained after birth, and progressed to significant postpartum depressive symptoms. Unplanned pregnancy has been associated with depressive symptoms during pregnancy and the postpartum period (Beck, 2008a; Cheng et al., 2009).

Lack of emotional support was significantly associated with violence in this group of women. Women with a history of abuse may have difficulty forming other types of social bonds. Women who have been victimized find it hard to disclose their experiences, seek help, and are more likely to be depressed (Flury, Nyberg, & Riecher–Rossier, 2010; Keeling & Mason, 2011; Kendall–Tackett, 2007). The final model of factors related to postpartum depressive symptoms showed that lack of social support was associated with increased postpartum depressive symptoms. Low social support has repeatedly been reported as a risk factor for PPD (Beck, 2008a; Diaz et al., 2007).

Postpartum depressive symptoms were reported by 45% of the women in this study. This finding is similar to a literature review showing that in most studies the prevalence of depressive and anxiety symptoms in Chile during the postpartum period increased up to 50% (Jadresic, Nguyen, & Halbreich, 2007). The number of pregnancies was also significantly related to postpartum depressive symptoms. First-time mothers were more likely to report depressive symptoms. However, VAW was the strongest factor associated with increased odds of significant postpartum depressive symptoms. In fact, such symptoms were significantly associated with all types of violence reported by the Chilean women. This finding has been reported by other authors in many countries, such as Australia, Brazil, Canada, and the United States (Beydoun et al., 2010; Garabedian et al., 2011; Lancaster et al., 2010; Ludermir et al., 2010; Romito et al., 2009; Urquia et al., 2011; Valentine et al., 2011). Crempien et al. (2011) reported that anxiety and depressive symptoms were positively correlated with domestic violence in Chilean pregnant women. Poo et al. (2008) assessed domestic violence with one dichotomous question and found that it was associated with PPD. Women in the current study responded to a questionnaire screening three types of violence: psychological, physical, and sexual; all three were significantly associated with postpartum depressive symptoms. An important finding in this study was that 84% of women with such symptoms reported an experience in their lifetimes of VAW; moreover, researchers found that women in an ongoing abusive relationship described high levels of such symptoms.

The hypothesis of this study was accepted; women who experienced violence were more likely to report postpartum depressive symptoms. Acknowledgment of the strong association between domestic violence and these symptoms should lead to screening during the prenatal and postpartum

periods as a way to isolate risk for PPD. Routine screening can increase the recognition of violence and referral for assistance; in fact, many of the women in the study who reported violence would not have been identified except for assessment with the WAS. The recommendation is for further assessment and intervention for violence and PPD by health care providers among women's health services in Chile. Screening for violence and PPD with validated tools is a practice that could make a great difference in a prompt diagnosis, prevention, and management of these two important public health problems. VAW is a complicated issue that needs to be addressed and recognized by health care providers as a public health problem that affects women. Educational programs for health care providers need to incorporate training in the assessment of violence. Guidelines should be implemented to increase the identification of violence in Chilean Health Service.

Several limitations of this study should be noted. First, not all potential factors that influence violence and PPD were examined in the analyses, so the results may have residual confounding. Second, the cross-sectional design prohibits assessment of the temporal relations of factors to dependent variables. Third, the sample size was limited, which inhibited researchers' ability to detect smaller associations as statistically significant. Fourth, researchers used a convenience sample, which limits the representativeness of the sample and thus the generalizability of results. Finally, the reliability of one of the tools used in the study was some what low. The author recommends precaution in generalizing the findings beyond this area or to women who do not have similar characteristics. However, this study serves as a base for proposing further research in this important issue to identify other factors related to violence and PPD in Chilean women.

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