The Impact of Physical, Psychological, and Sexual Intimate Male Partner Violence on Women's Mental Health: Depressive Symptoms, Posttraumatic Stress Disorder, State Anxiety, and Suicide

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ABSTRACT

Objective: This study aimed to determine the impact of lifetime physical, psychological, and sexual intimate male partner violence (IPV) on the mental health of women, after controlling for the contribution of lifetime victimization. The comorbidity of depressive symptoms and posttraumatic stress disorder (PTSD) and their relation to state anxiety and suicide were also assessed.

Methods: Physically/psychologically ($n = 75$) and psychologically abused women ($n = 55$) were compared with nonabused control women ($n = 52$). Information about sociodemographic characteristics, lifetime victimization, and mental health status (depressive and state anxiety symptoms, PTSD, and suicide) was obtained through face-to-face structured interviews.

Results: Women exposed to physical/psychological and psychological IPV had a higher incidence and severity of depressive and anxiety symptoms, PTSD, and thoughts of suicide than control women, with no differences between the two abused groups. The concomitance of sexual violence was associated with a higher severity of depressive symptoms in both abused groups and a higher incidence of suicide attempts in the physically/psychologically abused group. The incidence of PTSD alone was very rare, and depressive symptoms were either alone or comorbid with PTSD. The severity of state anxiety was higher in abused women with depressive symptoms or comorbidity, as was the incidence of suicidal thoughts in the physically/psychologically abused group. Lifetime victimization was not a predictor of the deterioration of mental health in this study.

Conclusions: These findings indicate that psychological IPV is as detrimental as physical IPV, with the exception of effects on suicidality, which emphasizes that psychological IPV should be considered a major type of violence by all professionals involved.

INTRODUCTION

ONE OF THE MAJOR PUBLIC HEALTH PROBLEMS that has both short-term and long-term mental and physical health consequences for women is intimate partner violence (IPV).[1,2] This type of violence refers to actual or threatened physical, sexual, or psychological violence perpetrated by current or former partners. The prevalence of IPV toward women is high in most societies, regardless of such issues as economic status, religion, or race, as 10%–69% of women have been exposed to physical violence at some point in their lives. This is often accompanied by psychological violence and, in one third to over one half of cases, by sexual violence.[3–5] During the last two decades, the number of studies describing the effects of IPV on women's mental health has increased significantly, the most prevalent mental health sequelae being depression, posttraumatic stress disorder (PTSD), and anxiety.[1,2,6–8] Furthermore, IPV is strongly associated with suicidal behavior, sleep and eating disorders, social dysfunction, and an increased likelihood of substance abuse.[7,9–11] However, although women may be exposed to physical, psychological, or sexual IPV, most studies have focused on the impact of physical IPV on health,[2] with the possible concomitance of psychological or sexual IPV being taken into account in few studies.[12–20] Those studies that have included psychological IPV have indicated that this type of IPV *per se* is enough to predict mental health sequelae.[14–17] Furthermore, the concomitance of sexual violence increases the negative impact of IPV on mental health.[18–20] Very few studies have assessed the impact of psychological IPV alone.[21,22]

Community studies have demonstrated that there is a strong relationship between PTSD and depression in trauma victims.[23–25] This comorbidity has been found in several types of victims of interpersonal violence, including women exposed to childhood sexual abuse and adolescent and adult victims of physical and sexual assault.[26–28] Despite the increasing amount of research on the impact of IPV on women's mental health, however, only a few studies have examined the comorbidity between PTSD and depression, finding that they are highly correlated.[29–31] This comorbidity may be associated with a more severe mental health deterioration.

Childhood abuse and adulthood experiences of victimization are frequently associated with IPV.

Women reporting a history of childhood abuse or adulthood victimization have an increased risk of IPV.[32–34] Therefore, lifetime history of victimization other than IPV should be controlled for when studying the impact of IPV on women's mental health, as it is itself associated with psychopathology.[34–43] Previous victimization may also be considered a risk factor for developing psychopathology when victims are confronted with a new experience of violence.[44] However, the contribution of lifetime history of victimization has been taken into account in only a few studies assessing the impact of IPV on women's mental health.[40,44,45]

The main aim of this study was to determine the specific impact of physical, psychological, and sexual IPV on women's mental health, after controlling for the contribution of a lifetime history of victimization. Based on findings in previous research, it was hypothesized that psychological IPV would be as detrimental as physical IPV on depressive, PTSD, and anxiety symptomatology and suicidality in women. Additionally, the comorbidity of PTSD and depressive symptoms and their relation to anxiety and suicide were also assessed.

MATERIALS AND METHODS

Subjects

The present study is part of a larger research project on the impact of IPV on women's mental and physical health as well as the functioning of the endocrine and the immune systems,[46–48] carried out between 2000 and 2002 on a sample of 182 women from the Valencian Community of Spain. Female victims of IPV ($n = 130$) were recruited from the 24-hour centers for helping women, and control women ($n = 52$), who lived in a nonviolent partner relationship, were recruited from women's clubs. All participants were of Spanish nationality. The study was approved by the University of Valencia research ethics committee, and after a complete description of the study to the subjects, written informed consent was obtained. Subjects did not receive any money or other inducement for their participation.

Assessment interviews

The study consisted of a structured interview in which one of four trained female psychologists

asked about the woman's life and health. In general, each woman was interviewed by the same psychologist four to six times, each session taking 1.5 hours. A comprehensive questionnaire was designed for a face-to-face interview. The majority of questions were devised to yield objective factual reports. The questionnaires from which information for the present study was obtained are described later, and more detailed information is given in Garcia-Linares et al.[47] Information about age, level of education, and previous psychological, psychiatric, and psychopharmacological treatment was obtained as control variables.

Violence perpetrated by an intimate male partner. Detailed information about the different types of violence (physical, sexual, and psychological) perpetrated by the intimate male partner was obtained. Each type consisted of one or more of the acts described below. Women were asked to answer "yes" or "no" to the incidence of each act since the beginning of the relationship with the partner. Physical violence included punches, kicks, slaps, pushes, bites, and strangling. Sexual violence included forced sex (vaginal or anal penetration, oral sex, objects inserted in vagina or anus); forced homosexual sex; forced sex with animals, prostitution, or sex in public; physical violence during sexual intercourse (bites, kicks, blows, and slaps); threats to hit the woman or children if rejecting sex, including threats with knives, guns, or other weapons; involvement of children in forced sex or witnessing sexual attacks; and forced or coerced use of pornographic films and photos. Psychological violence included verbal attacks (insults, humiliations); control and power (isolation from family and friends, impediment of decision making, economic abandonment); pursuit and harassment; verbal threats (woman and family's life threatened, threats regarding the custody of children, intimidating phone calls); and blackmail (economic or emotional). Control women were asked the same questions in order to ensure that they had had no experience of violence in any intimate partner relationship. Endorsement or not of any of the acts of physical, sexual, or psychological violence was used as the criterion to designate women as abused (victims of any kind of IPV) or nonabused (not victims of IPV).

As different interviewers participated in this study, we computed the kappa (κ) coefficient to estimate the agreement between the responses obtained by two different raters to estimate the interrater reliability. Whereas 49 out of a total of 62 questions have a κ value of 1, the values ranged from 0.8 to 1, from 0.83 to 1, and from 0.65 to 1 for the physical, psychological, and sexual abuse questionnaires, respectively.[47]

Lifetime history of victimization. Childhood abuse. Women were asked about the incidence, duration, frequency, and use of coercive instruments to perpetrate physical, sexual, or psychological abuse during childhood (prior to 14 years old). Physical abuse was defined as described. Sexual abuse included one or more of the following acts: forced sex, forced to touch a male's sexual organs or being touched, forced exposure to the display of sexual organs, and threats of forced sex. Psychological abuse was defined as described except for the following acts, which were not included: threats regarding custody of children and impeding decision-making. Adulthood victimization. Women were also asked about their experience of violence during adulthood independent of their being a victim of IPV. Physical, sexual, and psychological violence were defined as described for childhood abuse.

Mental health assessment. Depressive symptoms. The presence and severity of depressive symptoms were measured with the Beck Depression Inventory (BDI). Total scores of the BDI range from 0 to 63. Women with BDI scores ranging from 0 to 8 were considered as having no symptoms of depression, from 9 to 18 as mild, from 19 to 29 as moderate, and from 30 to 63 as severe depressive symptoms.[49] The Spanish version of BDI used in this study was validated by Conde and Useros,[50] the coefficient of internal consistency being 0.88. Several studies support the internal consistency and the construct validity of this Spanish version.[51,52] Cronbach's alpha (α) coefficient of BDI scale was 0.90. State anxiety. Spielberger's State-Trait Anxiety Inventory (STAI) was used to measure current levels of state anxiety symptoms.[53] In this study, the Spanish version of the STAI, validated and adapted by TEA Editions, was used.[54] Posttraumatic stress disorder. The incidence and severity of symptoms of current PTSD were assessed with Echeburúa's Severity of Symptom Scale of Posttraumatic Stress Disorder.[55–58] It is a structured interview based on DSM-IV criteria. The instrument has a high in-

ternal consistency with a Cronbach's α coefficient of 0.92 and a high test-retest reliability, as well as a good discriminant, concurrent, and construct validity. In the present study, Cronbach's α coefficient for internal consistency was 0.93. The Criterion A stressor was assessed by asking the woman if she had experienced an unusual, extremely distressful event (irrespective of whether or not it was IPV related). Either type of event was considered a qualifying trauma when it met the DSM-IV criteria for PTSD and when distressing symptoms persisted for at least 4 weeks. Thoughts and attempts of suicide. Women were asked about the lifetime incidence of thoughts and attempts of suicide.

Analyses

The three groups of women (nonabused, physically/psychologically abused, and psychologically abused) were compared with respect to age and scores for depressive and anxiety symptoms and PTSD using one-way analysis of variance (ANOVA). Correlations among scores for depressive, anxiety, and PTSD symptomatology were assessed using Pearson's linear correlation coefficient. The level of education, prevalence of childhood abuse, adulthood victimization, diagnoses of PTSD, and incidence of thoughts and attempts of suicide were compared using Pearson's chi-square tests. To determine the impact of sexual IPV concomitant with physical or psychological IPV on mental health status, each group of abused women was divided into two subgroups (with and without concomitance of sexual IPV). Within each group, the two subgroups were compared with respect to the scores for depressive and anxiety symptoms and PTSD by Student's t test and with respect to the incidence of PTSD by Pearson's chi-square test. To determine the prevalence of comorbidity between depressive symptoms and PTSD and its relation to the level of state anxiety and incidence of thoughts and attempts of suicide, each group of abused women was divided into four subgroups: (1) neither depressive symptoms nor PTSD, (2) only depressive symptoms, (3) only PTSD, and (4) both depressive symptoms and PTSD. Within each group, the four subgroups were compared with respect to the level of depressive symptoms, state anxiety, and the incidence of thoughts and attempts of suicide using ANOVA, Pearson's chi-square, or Student's t test when appropriate. To estimate the effect sizes in ANOVAs and t tests, ω^2 and d were computed, respectively.[59–61]

To assess the relationship between IPV and mental health status after controlling for the variables age, psychological (dichotomous), psychiatric (dichotomous), and psychopharmacological (dichotomous) treatment, and lifetime history of victimization (numerical from a factorial analysis), hierarchical multiple regression analyses were conducted entering at step 1, the control variables (age, previous psychological, psychiatric, and psychopharmacological treatment), at step 2, the incidence of lifetime history of victimization, and at step 3, the incidence of IPV. For the hierarchical multiple regression analyses, the α level was adjusted according to a Bonferroni correction. The adjusted α level was 0.0125 as a result of dividing the nominal α level (0.05) by the number of regression analyses (4). Thus, the level of significance for hierarchical multiple regression analyses was set at $p < 0.0125$. The statistical power for ΔR^2 in this regression analyses was also estimated.[62] For the rest of the analyses, the level of significance was set at $p < 0.05$, and all tests were two-tailed.

RESULTS

Subjects

One hundred eighty-two women participated in this study. They were distributed into three groups: nonabused ($n = 52$), physically/psychologically abused ($n = 75$), and psychologically abused ($n = 55$) by their intimate male partners. There were no differences between groups in age, and educational level was not associated with IPV (Table 1).

Violence perpetrated by intimate male partner

All women who were subjected to physical violence also suffered from some form of psychological violence (physically/psychologically abused group) (Table 1). Furthermore, 32% of the physical/psychologically abused and 16.4% of the psychologically abused women were also sexually abused by their partners. Most women experienced violence by their partner during the 12 months prior to their participation in the study.

TABLE 1. CHARACTERISTICS OF WOMEN WHO WERE NONABUSED, PHYSICALLY/PSYCHOLOGICALLY ABUSED, AND PSYCHOLOGICALLY ABUSED (%) BY INTIMATE MALE PARTNERS

Variable	Nonabused women (n = 52)	Physically/ psychologically abused women (n = 75)	Psychologically abused women (n = 55)	Analysis
Age (mean ± SD)	46.6 ± 12.4	42.5 ± 11.0	43.9 ± 10.7	$F = 2.0$, $df = 2, 179$, n.s.
Level of education				$\chi^2 = 9.1$, $df = 12$, n.s.
Illiterate	0	1.3	1.8	
Able to read and write	1.9	9.3	9.1	
Incomplete primary school	15.4	25.3	18.2	
Primary school	38.5	32.0	40.0	
Secondary school	36.5	24.0	25.5	
University studies: 3–4 years	3.8	2.7	3.6	
University studies: 5–6 years	3.8	5.3	1.8	
Psychiatric treatment	13.5	33.3	36.4	$\chi^2 = 8.3$, $df = 2$, $p < 0.02$
Psychological treatment	19.2	44	38.2	$\chi^2 = 8.6$, $df = 2$, $p = 0.02$
Psychopharmacological treatment				
Antidepressants	13.5	21.3	21.8	$\chi^2 = 1.6$, $df = 2$, n.s.
Anxiolytics	11.5	24.0	10.9	$\chi^2 = 5.2$, $df = 2$, n.s.
Hypnotics	3.8	8.0	3.6	$\chi^2 = 1.5$, $df = 2$, n.s.
Tranquilizers	5.8	20.0	18.2	$\chi^2 = 5.3$, $df = 2$, n.s.
Childhood abuse				
Physical	26.9	49.3	56.4	$\chi^2 = 10.3$, $df = 2$, $p < 0.01$
Psychological	27.5	44.4	40.7	$\chi^2 = 3.8$, $df = 2$, n.s.
Sexual	15.4	40.0	34.5	$\chi^2 = 9.0$, $df = 2$, $p < 0.01$
Adulthood victimization				
Physical	9.6	25.3	16.4	$\chi^2 = 5.3$, $df = 2$, $p < 0.07$
Psychological	25.0	43.8	33.3	$\chi^2 = 4.8$, $df = 2$, $p < 0.09$
Sexual	13.5	28.0	32.7	$\chi^2 = 5.7$, $df = 2$, $p < 0.06$
Intimate partner violence				
Physical	0	100	0	—
Psychological	0	100	100	—
Sexual	0	32	16.4	$\chi^2 = 21.4$, $df = 2$, $p < 0.001$
Intimate partner violence during the last year				
Physical	0	89.3	0	—
Psychological	0	97.3	88.7	$\chi^2 = 4.0$, $df = 1$, $p < 0.05$
Sexual	0	18.1	3.8	$\chi^2 = 5.7$, $df = 1$, $p < 0.02$

Lifetime history of victimization

There was a history of childhood abuse in all three groups (in 48% of nonabused women, in 64% of physically/psychologically abused women, and in 67.3% of psychologically abused women) (Table 1). Both physical and sexual childhood abuse were associated with IPV, although this was not the case for childhood psychological abuse, the incidence of physical and sexual abuse being higher than expected under the assumption of no relationships between variables in the two abused groups. On the other hand, violence perpetrated toward these women during adulthood by individuals other than partners occurred in all three groups, there being a trend toward a significant association with IPV in the three types of violence (physical, psychological, and sexual adulthood victimization).

Current mental health status

There were significant differences between groups in the severity of self-rated depressive, state anxiety, and PTSD symptomatology (Table 2). *Post hoc* comparisons showed that both physically/psychologically and psychologically abused women had higher scores than the nonabused group, with no differences between the two abused groups. According to Cohen,[61] the effect sizes in all the ANOVAs were large. The severity of depressive symptoms, the incidence of PTSD, and the incidence of lifetime thoughts

TABLE 2. SEVERITY OF SELF-RATED DEPRESSIVE SYMPTOMS, STATE ANXIETY, PTSD, AND INCIDENCE OF
THOUGHTS AND ATTEMPTS OF SUICIDE IN WOMEN WHO WERE NONABUSED, PHYSICALLY/
PSYCHOLOGICALLY ABUSED, AND PSYCHOLOGICALLY ABUSED BY INTIMATE MALE PARTNERS

Variable	Nonabused women (n = 52)	Physically/ psychologically abused women (n = 75)	Psychologically abused women (n = 55)	Analysis
BDI[a] (mean ± SD)	5.7 ± 5.2	16.6 ± 12.0***	14.8 ± 8.9***	$F = 21.4$, $df = 2, 179$, $p < 0.001$ ($\omega^2 = 0.18$)
Severity of depressive symptoms (% of women)				$\chi^2 = 48.0$, $df = 6$, $p < 0.001$
No depression	82.7	29.3	32.7	
Mild	13.5	36.0	36.4	
Moderate	3.8	17.3	25.5	
Severe	0	17.3	5.5	
State anxiety (STAI))[b] (mean score ± SD)	17.7 ± 18.2	54.2 ± 34.1***	47.7 ± 35.8***	$F = 22.6$, $df = 2, 179$, $p < 0.001$ ($\omega^2 = 0.19$)
PTSD[c]				
Incidence (% of women)	0	28.0	34.5	$\chi^2 = 21.3$, $df = 2$, $p < 0.001$
Total score (mean score ± SD)	2.1 ± 3.0	14.7 ± 12.1***	14.2 ± 10.1***	$F = 30.0$, $df = 2, 179$, $p < 0.001$ ($\omega^2 = 0.24$)
Subscales PTSD Score (mean ± SD)				
Reexperiencing	1.0 ± 1.4	5.0 ± 4.2***	4.8 ± 3.7***	$F = 23.0$, $df = 2, 179$, $p < 0.001$ ($\omega^2 = 0.19$)
Avoidance	0.7 ± 1.7	5.2 ± 5.1***	5.2 ± 4.3***	$F = 22.3$, $df = 2, 179$, $p < 0.001$ ($\omega^2 = 0.19$)
Arousal	0.4 ± 0.9	4.5 ± 3.9***	4.2 ± 3.7***	$F = 26.7$, $df = 2, 179$, $p < 0.001$ ($\omega^2 = 0.22$)
Suicidal thoughts (% of women)	7.7	58.7	43.6	$\chi^2 = 33.9$, $df = 2$, $p < 0.001$
Suicidal attempts (% of women)	1.9	34.7	12.7	$\chi^2 = 23.5$, $df = 2$, $p < 0.001$

[a]BDI, Beck's Depression Inventory; [b]STAI, Spielberger's State-Trait Anxiety Inventory; [c]PTSD, posttraumatic stress disorder.

***Differs from nonabused women, $p < 0.001$.

of suicide were also associated with IPV, being higher than expected in the two abused groups. Although the lifetime incidence of attempts of suicide was also associated with IPV, it was only higher than expected in physically/psychologically abused women. These assumptions are based on the very high (0.99) statistical power for rejecting the null hypothesis that IPV is not related to the dependent variables assessed. Finally, there were positive correlations between depression score and state anxiety ($r = 0.61, n = 182, p < 0.001$) and PTSD scores ($r = 0.69$, $n = 182$, $p < 0.001$), and state anxiety was also correlated positively with PTSD ($r = 0.52$, $n = 182$, $p < 0.01$).

Impact of concomitance of sexual IPV on current mental health status

As physically/psychologically and psychologically abused groups did not differ in depressive symptoms, state anxiety, or PTSD scores, they were grouped together in order to evaluate the impact of the concomitance of sexual violence on mental health status. This comparison showed that depression score was significantly higher in women who were also sexually abused by their partners than in those who were not ($t = -2.0$, $df = 41.785$, $p < 0.05$, estimated effect size: $d = 0.49$), and total PTSD score approached statistical significance ($t = -1.7$, $df = 128$, $p = 0.086$, $d = 0.35$). In contrast, there were no differences in state anxiety levels ($t = -1.1$, $df = 128$, n.s, $d = 0.22$) or in the incidence of PTSD (chi-square = 0.6, $df = 1$, n.s.). Within-group comparison indicated that physically/psychologically abused women who had also been sexually abused had a higher incidence of attempts of suicide than expected compared with those who had not (chi-square = 3.7, $df = 1$, $p < 0.05$), whereas no differences were found within the psychologically

abused group (chi-square = 0.9, $df = 1$, n.s.). Finally, there were no significant differences in the incidence of thoughts of suicide.

Comorbidity of depressive symptoms and PTSD and its relation to state anxiety and suicide

Women in the three groups were categorized as having neither depressive nor PTSD symptoms; having only depressive symptoms or PTSD, or having comorbidity of depressive symptoms and PTSD (Table 3). Most women in the nonabused group (82.7%) but only 26.7% of physically/psychologically abused and 29.1% of psychologically abused women had no symptoms. Whereas few women in either of the abused groups had only PTSD (2.7% of the physically/psychologically abused and 3.6% of the psychologically abused), the incidence of only depressive symptoms (45.3% of the physically/psychologically abused and 36.4% of the psychologically abused) was higher than the comorbidity (25.3% of the physically/psychologically abused and 30.9% of the psychologically abused). The severity of depressive symptoms varied in physically/psychologically abused women depending on the diagnosis (chi-square = 14.8, $df = 2$, $p < 0.001$), with severe symptoms being lower than expected in the subgroup with only depressive symptoms but higher in the comorbidity subgroup. These differences were not found in the psychologically abused group (chi-square = 2.2, $df = 2$, n.s.).

The level of state anxiety also varied depending on the diagnosis. In nonabused women, it was higher in depressed women than in those with no symptoms ($t = -2.0$, $df = 50$, $p < 0.05$). Similarly, in abused women, the level of state anxiety also varied (physically/psychologically abused: $F = 7.1$, $df = 3, 74$, $p < 0.001$; psychologically abused: $F = 12.2$, $df = 3, 54$, $p < 0.001$), with *post hoc* comparisons showing that it was higher in women having only depressive symptoms or comorbidity than in those with no symptoms.

The incidence of thoughts of suicide was higher in depressive nonabused women than in those with no symptoms, although it did not reach statistical significance (chi-square = 3.2, $df = 1$, $p = 0.07$), and there were no differences in the incidence of suicide attempts (chi-square = 0.2, $df = 1$, n.s.). In physically/psychologically abused women, the incidence of thoughts of suicide was higher than expected in those having only depressive symptoms or comorbidity (chi-square = 9.1, $df = 3$, $p < 0.03$). However, attempts of suicide were not associated with specific symptomatology (chi-square = 4.1, $df = 3$, n.s.). In psychologically abused women, neither thoughts (chi-square = 1.2, $df = 3$, n.s.). nor attempts (chi-square = 3.1, $df = 3$, n.s.) of suicide were associated with specific symptomatology. Finally, the incidence of comorbidity was not associated with the concomitance of sexual violence (physically/psychologically abused: chi-square = 1.2, $df = 1$, n.s.; psychologically abused: chi-square = 0.4, $df = 1$, n.s.).

Contribution of lifetime history of victimization to mental health status

To determine the contribution of lifetime history of victimization to the mental health status of women, hierarchical multiple regression analyses were conducted (Table 4). The analyses showed that neither the control variables (age, psychopharmacological, psychiatric, and psychological treatment) nor the lifetime history of victimization predicted depressive, PTSD, and state anxiety symptomatology (Table 4). In contrast, the experience of IPV was a significant predictor of depressive symptoms ($F = 7.75$, $df = 3$, 110, $\Delta R^2 = 0.15$, $p < 0.001$, statistical power = 0.99), PTSD ($F = 15.21$, $df = 3$, 110, $\Delta R^2 = 0.24$, $p < 0.001$, statistical power = 0.99), and state anxiety ($F = 7.03$, $df = 3$, 110, $\Delta R^2 = 0.14$, $p < 0.001$, statistical power = 0.99), with physical and psychological IPV being the primary factors in depressive symptoms and state anxiety and only psychological IPV being the primary factor in PTSD. With regard to the comorbidity between depressive symptoms and PTSD, control variables did predict it ($F = 3.39$, $df = 7$, 118, $\Delta R^2 = 0.17$, $p < 0.002$, statistical power = 0.99), with the intake of tranquilizers as the primary factor. Although lifetime history of victimization did not predict comorbidity, however, the experience of IPV was a significant predictor ($F = 8.58$, $df = 3$, 110, $\Delta R^2 = 0.15$, $p < 0.001$), with psychological IPV being the primary factor.

DISCUSSION

This study shows that IPV is a very complex experience of violence, and considering it as a single category is far from reality. Whereas in some

TABLE 3. COMORBIDITY OF SELF-RATED DEPRESSIVE SYMPTOMS (DS) AND PTSD, LEVEL OF ANXIETY AND SUICIDAL THOUGHTS AND ATTEMPTS IN NONABUSED, PHYSICALLY/PSYCHOLOGICALLY ABUSED, AND PSYCHOLOGICALLY ABUSED WOMEN (%)

	Nonabused women (n = 52)				Physically/psychologically abused women (n = 75)				Psychologically abused women (n = 55)			
	No symptoms	DS	PTSD	Comorbid PTSD/DS	No symptoms	DS	PTSD	Comorbid PTSD/DS	No symptoms	DS	PTSD	Comorbid PTSD/DS
Women	82.7	17.3	0	0	26.7	45.3	2.7	25.3	29.1	36.4	3.6	30.9
Severity of depressive symptoms												
Mild	—	77.8	—	—	—	67.3	—	21.1	—	65	—	41.2
Moderate	—	22.2	—	—	—	23.5	—	26.3	—	30	—	47.1
Severe	—	0	—	—	—	8.8	—	52.6	—	5	—	11.8
State anxiety												
STAI (mean ± SD)	15.5 ± 18.2	28.3 ± 15.2*	—	—	32.9 ± 28.3	58.9 ± 32.3*	11.6 ± 11.8	72.5 ± 30.2**	13.9 ± 11.6	55.4 ± 34.1***	41.3 ± 57.0	71.2 ± 28.3
Suicidal thoughts	4.7	22.2	—	—	40	61.8	0	78.9	43.8	35	50	52.9
Suicide attempts	2.3	0	—	—	20	41.2	0	42.1	12.5	5	0	23.5

*Differs from No symptoms same group, p < 0.05; **Differs from No symptoms same group, p < 0.002; ***Differs from No symptoms same group, p < 0.001.

TABLE 4. Summary of Hierarchical Regression Analyses for Variables Predicting Depressive, PTSD, Anxiety Symptomatology and Comorbidity Depressive Symptoms/PTSD in Nonabused, Physically/Psychologically Abused, and Psychologically Abused Women ($n = 182$)

Step and predictors	Depressive symptoms					Anxiety					PTSD					Comorbidity depressive symptoms/PTSD				
	Total R^2	R^2 change	F change	β[a]	t	Total R^2	R^2 change	F change	β	t	Total R^2	R^2 change	F change	β	t	Total R^2	R^2 change	F change	β	t
Step 1																				
Control variables	0.04	0.04	0.73			0.08	0.08	1.43			0.10	0.10	1.80			0.17	0.17	3.39**		
Age				0.03	0.34				−0.01	−0.04				−0.12	−1.61				−0.03	−0.32
Pharmacological treatment																				
Antidepressants				0.20	1.94				0.08	0.75				0.19	2.16				0.04	0.40
Anxiolytics				−0.08	−0.81				0.06	0.62				−0.08	−0.89				0.17	1.83
Hypnotics				−0.08	−0.84				0.06	0.65				−0.03	−0.42				0.01	0.05
Tranquilizers				−0.01	−0.12				0.03	0.32				−0.01	−0.01				0.25	2.95**
Psychiatric treatment				0.02	0.15				0.01	0.14				0.06	0.72				−0.01	−0.07
Psychological treatment				−0.03	−0.31				−0.01	−0.13				−0.10	−1.14				−0.10	−1.17
Step 2																				
Lifetime history of victimization	0.12	0.08	2.04			0.12	0.05	1.17			0.17	0.08	2.05			0.19	0.03	0.76		
Childhood abuse																				
Physical/psychological				−0.13	−1.56				−0.08	−0.95				−0.13	−1.72				−0.11	−1.32
Sexual				−0.06	−0.76				−0.01	−0.05				0.01	0.04				0.01	0.01
Adulthood victimization																				
Physical				−0.11	−1.35				−0.11	−1.37				−0.10	−1.39				0.09	1.18
Psychological				0.21	2.54*				0.14	1.67				0.18	2.49				0.02	0.23
Sexual				−0.11	−1.26				−0.12	−1.32				−0.16	−2.09				0.06	0.71
Step 3																				
Intimate partner violence	0.27	0.15	7.75***			0.27	0.14	7.03***			0.42	0.24	15.21***			0.35	0.15	8.58***		
Physical				0.23	2.70**				0.24	2.76**				0.16	2.11				0.08	0.96
Psychological				0.35	3.97***				0.32	3.61***				0.48	6.01***				0.34	4.76***
Sexual				0.08	0.96				0.09	1.06				0.18	2.32				0.12	1.48

[a]β, standardized regression coefficient.
*$p < 0.0125$; **$p < 0.01$; ***$p < 0.001$.

cases, IPV involves physical, psychological, and sexual violence, in others it involves only psychological violence. Thus, the contribution of the different experiences of violence should be taken into account when assessing the impact of IPV on women's mental health.

Our results agree with previous studies that indicate that IPV has a negative effect on women's mental health, increasing the incidence of depressive, PTSD, and state anxiety symptomatology, as well as thoughts and attempts of suicide. However, as most previous studies have mainly paid attention to physical IPV, with few studies obtaining information about the concomitance of psychological or sexual violence[12–20] or the impact of psychological violence alone,[21,22] one of the main findings of this study has been to demonstrate that psychological IPV alone is as detrimental to women's mental health as physical IPV, which almost always involves some form of psychological violence. Furthermore, for both depressive and anxiety symptomatology, psychological IPV was an independent and stronger predictor than physical IPV, and it was the only factor contributing to both PTSD and the comorbidity between depressive and PTSD symptomatology. Thus, our results agree with those obtained in previous studies that have assessed the independent contribution of psychological IPV to depression[16,22] and PTSD.[15] It disagrees with the study of Basile et al.,[17] however, in which both physical and psychological IPV contributed to PTSD symptoms, possibly due to the characteristics of their sample, which was part of a national survey. Importantly, in our study, no differences were found between women exposed to physical/psychological IPV and those exposed only to psychological IPV. Altogether, these results are very important, as psychological IPV is normally still considered a minor type of violence and, consequently, receives less attention than physical IPV by clinicians, lawyers, policymakers, and researchers.[21,63] Thus, being exposed to psychological IPV alone can no longer be considered a minor type of IPV when assessing and recognizing the impact of IPV on women's mental health.

This study indicates that the concomitance of sexual violence with both physical/psychological and psychological IPV increases the severity of depressive symptoms, although it increases the incidence of suicide attempts only when it is concomitant with physical/psychological IPV. These results agree with the study of Wingood et al.,[18] which showed that the concomitance of sexual IPV with physical IPV increased the likelihood of using drugs and attempting suicide in women. In our study, however, sexual IPV was not an independent predictor in the contribution of IPV to either depressive, anxiety, and PTSD symptomatology or suicidality, which agrees with the study of Basile et al.[17] with regard to PTSD but disagrees with the study of Bennice et al.,[19] in which sexual IPV was an important independent contributor to severity of PTSD symptomatology. Thus, although the concomitance of sexual IPV has an impact on the deterioration of women's mental health, its independent contribution after controlling for other forms of IPV has been difficult to prove.

Our results indicate that the incidence of PTSD (IPV-related or not) alone in female victims of IPV is almost nonexistent, and most cases with a diagnosis of PTSD have comorbid depressive symptoms (physically/psychologically abused, 90.3%; psychologically abused, 89.3%). Thus, PTSD and PTSD/depression comorbidity were indistinguishable, which agrees with a previous study[24] but is much higher than in several other studies.[25–27] Our results disagree with previous studies of women victims of IPV,[27–29] as it was reported that a lower percentage of women with PTSD had comorbid depressive symptoms. On the other hand, the incidence of depressive symptoms alone obtained in this study (physically/psychologically abused, 45.3%; psychologically abused, 36.4%) was higher than in previous studies,[28,29] indicating that although there was a positive correlation between the severity of these two symptomatologies, depressive symptoms occurred independently of PTSD in the present sample of women victims of IPV. Differences in the method of assessment of depression (depressive symptoms vs. major depressive disorder) and PTSD (related to IPV or not), in the characteristics of the sample (size, context from which they were recruited, such as shelters, clinics, or advertisements), and the characteristics of the IPV (type, duration, time since the last IPV event, and being currently exposed or not to it) may be some of the reasons for this discrepancy. The hierarchical multiple regression equation indicated that only the intake of tranquilizers, but not lifetime history of victimization, predicted PTSD/depression comorbidity. However, psychological IPV was the only main predictor, not physical or sexual IPV, as could have been expected, as these

types of violence are considered more severe. These results are important for clinicians when intervening with women victims of IPV with PTSD symptomatology, as it would be necessary to screen for concomitant depressive symptoms.

The pattern of comorbidity in the present study was similar in both physically/psychologically and psychologically abused women, although, the relationship between comorbidity and the severity of depressive symptoms varied between these two abused groups. Depressive symptoms were more severe in physically/psychologically abused women when comorbid with PTSD, but this was not the case in psychologically abused women. This difference between physically/psychologically and psychologically abused women cannot be attributed to the experience or not of physical IPV, as although this type of IPV was a predictor factor of depressive symptoms, only psychological IPV predicted comorbidity. In contrast, the level of state anxiety was not related to comorbidity in either abused group. Although depressed women had higher levels of state anxiety than those with no symptoms, no differences were found between those with only depressive symptoms and those with comorbidity. Similarly, the incidence of suicidal thoughts in physically/psychologically, but not in psychologically abused women, was higher in those who had either only depressive symptoms or comorbidity. Thus, comorbidity of depressive and PTSD symptoms only exacerbated the severity of depressive symptoms in physically/psychologically abused women, although it was not related to severity of anxiety or suicidality, indicating that comorbidity of depressive and PTSD symptoms was not associated with a more severe deterioration of the mental health status of women, as was expected in accord with previous research.[25]

The incidence of childhood abuse was high in both women victims and nonvictims of IPV, although more IPV victims had been exposed to childhood abuse, especially physical and sexual abuse. Similarly, more women victims of IPV had been exposed to violence perpetrated by individuals other than partners during adulthood. These results are in accordance with previous studies that have reported childhood abuse as being a risk factor for IPV in women[32–34] and the high probability of cumulative experiences of victimization in the same person.[32–34] Thus, these results corroborated the necessity of controlling for lifetime history of victimization and its possible contribution to the

deterioration of mental health status when assessing women exposed to IPV. However, the hierarchical multiple regression equation indicated that in our sample, the main factor predicting mental health symptomatology was the current experience of IPV. This is in contrast to previous studies that examined the same relationships and found that childhood physical abuse and neglect contributed to depression[40,45] and childhood sexual abuse contributed to anxiety.[40] This discrepancy is probably due to the differences in the assessment of lifetime history of victimization, the different variables entered into the analyses, and that in our study the experience of IPV was very recent (during the previous year and even present at the moment of collection of information in most women), which may have impeded evaluation of the impact of previous victimization.

CONCLUSIONS

The results obtained in the present study clearly indicate that psychological IPV is, with some variations, as detrimental to women's mental health as is physical violence, having independent effects on depressive and anxiety symptoms and being the only factor contributing to PTSD and PTSD/depression comorbidity. Thus, psychological IPV, especially when it is the only type of IPV women experience, should be considered a major type of violence that deserves the full attention of researchers, clinicians, lawyers, and policymakers.

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