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## Differences in Physical and Mental Health Symptoms and Mental Health Utilization Associated With Intimate-Partner Violence Versus Childhood Abuse

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### Abstract

**Background**—There is ample evidence that both intimate-partner violence (IPV) and childhood abuse adversely affect the physical and mental health of adult women over the long term.

**Objective**—The authors assessed the associations between abuse, symptoms, and mental health utilization.

**Method**—The authors performed a cross-sectional survey of 380 adult female, internal-medicine patients.

**Results**—Although both IPV and childhood abuse were associated with depressive and physical symptoms, IPV was independently associated with physical symptoms, and childhood abuse was independently associated with depression. Women with a history of childhood abuse had higher odds, whereas women with IPV had lower odds, of receiving care from mental health providers.

**Conclusion**—IPV and childhood abuse may have different effects on women's symptoms and mental health utilization.

There is little doubt that both intimate-partner violence (IPV) and childhood abuse adversely affect the physical and mental health of adult women.<sup>1,2</sup> A metaanalysis found consistently increased rates of depression, suicidality, posttraumatic stress disorder (PTSD), and substance abuse in women who have experienced IPV, with weighted mean odds ratios (ORs) ranging from 3.55 to 5.62.<sup>3</sup> Studies have also consistently demonstrated an association between IPV and poorer overall general health,<sup>4–8</sup> greater number of physical symptoms,<sup>6,9–12</sup> and a wide array of specific physical symptoms.<sup>5,6,8,13</sup> These associations exist regardless of the form of IPV (physical, sexual, or emotional), current versus lifetime history, or clinic- versus population-based recruitment strategies. Similarly, a metaanalysis found consistent associations between childhood abuse and depression, suicidality, and PTSD.<sup>14</sup> Multiple studies have also found associations between childhood abuse and adult somatic complaints, symptom syndromes such as irritable bowel syndrome, and five of the leading causes of adult mortality.<sup>1,15</sup>

Fewer studies have assessed for independent effects of IPV and childhood abuse on adult health outcomes. Several studies do differentiate between childhood and adult abuse, but do not indicate the relationship between the perpetrator and victim. These studies generally find that patients abused both as children and adults have a higher risk of symptoms or a greater number of symptoms than those abused only as children or only as adults.<sup>16–19</sup> Our own work has found a dose–response relationship between the number of forms of violence (physical or sexual childhood abuse, IPV, and community violence) and risk of depressive symptoms or having more than six physical symptoms.<sup>10</sup> However, many details about the complex relationships among abuse, physical symptoms, and depression are still unclear; and even less is known about the differential effects of IPV and childhood abuse on adult healthcare utilization or patient preferences.

Our objective was to clarify the complex associations among IPV, childhood abuse, depressive and physical symptoms, and mental health services utilization.

## METHOD

### Participants

We conducted a brief cross-sectional survey of women presenting to an academic general internal-medicine clinic. Eligibility criteria were being age 18 years or older, speaking English, and having an appointment with a provider in the clinic on a recruitment day. Exclusion criteria included physical or mental impairment that precluded the ability to complete a questionnaire or provide informed consent, being an employee of the clinic, or having already completed the questionnaire on a previous visit. A total of 646 eligible women presented to the clinic on recruitment days, of which 380 (59%) completed the survey. An additional 307 women presenting to the clinic did not meet eligibility criteria because they were under age 18 (N=1), did not speak English (N=91); were mentally impaired (N=21), physically impaired (N=37), were clinic employees (N=8), or had previously completed the survey (N=149).

### Procedures

Recruitment days were chosen based on the availability of research assistants, but spanned all days of the week and times of day equally. On recruitment days, clinic personnel offered a flyer to consecutive, adult, English-speaking women. The flyer said “we are working to develop a new model of health care to better address the physical and mental symptoms experienced by our women patients.” There was no monetary compensation for completing the brief paper-and-pencil survey. However, the recruitment flyer mentioned the possibility of being eligible to participate in a future focus group and noted that focus group participants would receive \$20. A female research assistant approached female patients, obtained informed consent to participate in the brief written survey, and asked them if they would be willing to be contacted later to potentially participate in future phases of the study. All women were encouraged to take the brief written survey, regardless of their willingness to be contacted for future studies. Most participants completed the survey on paper, although the research assistant was available to help participants complete the survey if they had limited reading proficiency or were visually impaired. Participants who were accompanied to the clinic by another person, male or female, were escorted to a private location to participate in the informed-consent process and complete the survey. Women took approximately 10–20 minutes to complete the survey. To avoid potential selection bias, we did not present the study as focusing on violence or abuse. This article only uses data obtained in the brief written survey. Results of a subsequent focus group study<sup>20</sup> and a pilot intervention are presented separately. All protocols and materials were approved by the Human Subjects Committee of our Institutional Review Board.

## Instruments and Measures

Our health outcomes were depressive and physical symptoms. We measured depressive symptoms with the Depression scale of the Hopkins Symptom Checklist (HSCL-20).<sup>21–23</sup> Potential scores range from 0 to 4, with scores greater than 1.0 corresponding to at least mild depressive symptoms. We used the Patient Health Questionnaire– 15 (PHQ-15)<sup>24,25</sup> to measure physical symptoms. Potential scores range from 0 to 30, with higher scores indicating a greater number of symptoms. Mental health service outcomes were “currently seeing a mental health provider” and/or “taking an antidepressant,” as reported by the participant. Each condition was assessed with a single item.

Our main predictors were IPV and childhood abuse. We measured physical IPV with an adapted version of the Abuse Assessment Screen (AAS).<sup>26</sup> The AAS asks about physical IPV “within the last year” and “since you have been pregnant” using the question “have you been hit, slapped, kicked, or otherwise physically hurt by some-one?” We used the same item, but changed it to “Have you ever been hit. . .” in order to assess for lifetime physical IPV. The AAS then asks participants who answer yes to the physical IPV item to score each incident on to a scale of 1 to 6, with 1: threats of abuse, 2: slapping, pushing with no injuries or lasting pain; 3: punching, kicking, bruises, cuts, and/or continuing pain; 4: beating up—severe contusions, burns, or broken bones; 5: head injury, internal injury, or permanent injury; and 6: use of weapon or wound from weapon. Because scoring each incident would not be practical on a brief, written version for lifetime physical IPV, we created four new items to be answered if the participant had answered yes to the stem item on physical IPV. Each asked “How many times did he or she. . .” and then used the same categories as physical assaults as used in the AAS, with choices of 0, 1–4, 5–9, and  $\geq 10$ . The first three items corresponded to assaults that would score a 1, 2, or 3, respectively, on the AAS. Assault types that would have scored a 4, 5, or 6 on the AAS were grouped together into one item for the sake of brevity.

In our primary analysis, women who answered yes the stem item on physical IPV were considered IPV survivors. Because of the concern of several experts in the field that there may be an important difference between a woman who has only had occasional, low-level violence and one who has had either repeated low-level violence or who has experienced severe assaults, we conducted a secondary analysis, where we defined IPV as having experienced one-or-more severe physical assaults from an intimate partner (such as being punched, kicked, beat up, injured, or threatened with a weapon, the equivalent of a score of  $\geq 3$  on the AAS) or having experienced  $\geq 5$  slaps or pushes that did not result in lasting pain. We did not assess for sexual IPV.

Childhood abuse was assessed with two items that we created, one asking “Were you physically abused as a child?” and one asking “Were you sexually abused as a child?” In the primary analysis, we considered women who answered “yes” to either item to have a history of childhood abuse. In secondary analyses, we considered physical and sexual childhood abuse separately. We also assessed models that only included physical childhood abuse to correspond more closely to the level of information we collected about IPV. We included one item asking whether the participant had ever had diagnoses of schizophrenia or schizoaffective disorder or any psychotic symptoms. We specifically included this item so that participants who responded affirmatively would be excluded from the subsequent qualitative and pilot intervention portions of the study. This item is particularly important, however, in the analyses on mental health services utilization because people with chronic severe mental illness such as schizophrenia would likely be seen in the mental health system, regardless of their history of abuse. Because of the need for brevity, we did not assess for a more complete list of other mental health diagnoses. We also included items on age, race, and ethnicity. Because of the relatively low level of racial and ethnic diversity of our sample, race and ethnicity were collapsed into one dichotomous variable: white, non-Hispanic versus other.

## Data Analysis

We conducted bivariate analyses, looking for associations between each of our predictors, outcomes, or potential confounders, using two-sample *t*-tests, Wilcoxon signed-rank tests, and chi-square tests. We conducted multivariate analyses to assess for independent associations between violence history and our health and health-services outcomes. Because physical symptoms (PHQ-15) scores approximated a normal distribution, we used linear regression to assess for independent associations with severity of physical symptoms. Depression (HSCL-20) scores were highly skewed. Therefore, we dichotomized HSCL-20 scores, using a cutoff score of 1.0, and used logistic regression. We assessed independent associations with our two dichotomous mental health services outcomes (current care from a mental health provider and current antidepressant use) by logistic regression. We also adjusted the regression models for age and race. In order to understand how much of the association between violence history and each outcome is explained by physical or mental health factors, we present models with and without the inclusion of physical symptom scores, depressive symptom scores, and history of psychosis. We tested for a potential interaction between history of IPV and history of childhood abuse by including an interaction term in each model. The interaction term was not statistically significant in any analysis (all *p* values >0.2); thus, it was not included in the final models. We used STATA software (Version 8.2).

## RESULTS

A total of 380 women internal-medicine patients participated in the survey, a 59% response rate. The mean age was 51 years, with a range of 18 to 92 years. As is characteristic of Portland, OR, 84% were white, non-Hispanic. Thirty-five percent disclosed that they had been physically assaulted by an intimate partner. Thirty-eight percent had at least mild current depressive symptoms. The mean PHQ-15 score was 11, which is indicative of up to 11 mildly distressing or 5½ severely distressing physical symptoms.

Table 1 shows our sample characteristics and the results of the bivariate analyses. IPV was associated with higher rates of physical and sexual childhood abuse and higher scores on both the HSCL-20, measuring depression, and the PHQ-15, measuring physical symptoms. Physical and sexual childhood abuse were also associated with higher scores on both the HSCL-20 and the PHQ-15, as well as with higher rates of current antidepressant use and care from a mental health provider.

Table 2 shows the results of the multivariate analyses assessing health outcomes. After adjustment for demographic factors, IPV and childhood abuse were each independently associated with higher odds of having depressive symptoms. When health factors were added to the model, the association between depressive symptoms and childhood abuse was slightly attenuated, but remained statistically significant (OR: 2.09; *p*=0.01). In contrast, the addition of health factors, in particular, severity of physical symptoms, almost completely negated the association between IPV and depressive symptoms (OR: 1.10; *p*=0.70). Childhood abuse and IPV were both independently associated with severity of physical symptoms after adjustment for demographic factors. Further adjustment for health factors (in particular, severity of depressive symptoms) reduced the strength of the association, but IPV remained independently associated with severity of physical symptoms. History of psychosis was not associated with either physical or depressive symptoms.

Table 3 shows the results of the multivariate analyses assessing mental health care utilization. After adjustment for demographic factors, the odds of receiving care from a mental health provider were over three times higher for women with a history of childhood abuse (OR: 3.4; *p*<0.001), whereas there was a trend for women with a history of IPV to have lower odds of receiving care from a mental health provider (OR: 0.54; *p*=0.07). Further adjustment for health

factors, in particular, severity of depressive symptoms and history of psychosis, only slightly attenuated the association with childhood abuse (OR: 2.44;  $p=0.007$ ), and it strengthened the negative association with IPV (OR: 0.48;  $p=0.04$ ). Childhood abuse was also independently associated with higher antidepressant use, with or without adjustment for health factors. In the final model, IPV was not associated with antidepressant use. As expected, both depressive symptoms and history of psychosis were associated with both measures of mental health utilization. Severity of physical symptoms was not associated with either care from a mental health provider or antidepressant use.

Secondary analyses, using a more strict definition of IPV, produced similar results, as did analyses that included physical and sexual childhood abuse separately or only incorporated information on physical childhood abuse. Results were also similar whether models adjusting for depressive symptoms used the HSCL-20 as a continuous or dichotomized variable.

## DISCUSSION

Our findings that both IPV and childhood abuse were associated with increased depressive and physical symptoms confirms what we and others have previously reported.<sup>10,16</sup> Similarly, the association between IPV and greater physical symptoms persisted, even after adjustment for depressive symptoms.<sup>10</sup> However, this study has yielded several important new findings. Although the association between childhood abuse and depression symptoms persisted after adjustment for severity of physical symptoms, the association between IPV and depression symptoms appeared to be largely explained by physical symptoms. Moreover, IPV and childhood abuse had opposite effects on mental health utilization, with childhood abuse increasing the odds of receiving care from mental health providers and using antidepressants, and IPV decreasing the odds of receiving care from mental health providers and not affecting the odds of using antidepressants.

Other studies have also hinted at a potential negative relationship between IPV and mental healthcare utilization. Although they did not adjust for childhood abuse or severity of mental or physical symptoms, Scholle et al.<sup>27</sup> found that depressed women with a history of abuse in their adult lives are less likely to seek mental health care than depressed women without a history of abuse. Similarly, qualitative studies of IPV survivors have noted negative attitudes toward referrals to psychiatry<sup>20,28</sup> or toward psychotropic medications.<sup>29</sup>

Our study has several important limitations. First, as a cross-sectional study, it can only assess associations, not causality. Our use of a health-seeking sample from a single, academic, internal-medicine practice with little racial diversity limits its generalizability, especially with regard to women of other racial backgrounds. Second, all data were self-reported. Although we used standardized measures of depressive symptoms and physical symptoms, we were unable to assess for actual mental health diagnoses or ascertain whether the physical symptoms were medically explained. We were unable to confirm participants' reports of healthcare utilization with actual clinic or pharmacy data. In the interest of keeping the survey very brief, we used a modified version of the Abuse Assessment Screen to assess for lifetime physical IPV and only used two items to assess for childhood abuse. It is possible that there was some misclassification due to false negatives or positives on each of these measures. We also did not collect data on the presence of PTSD, health insurance status, or access to mental health services. It is possible that the association between abuse and physical symptoms or depression may be due to differential access to mental health care or mediated by PTSD.

Our study cannot provide clear explanations for differential effects of IPV and childhood abuse on health and healthcare utilization. One can only speculate as to why these relationships exist. Childhood abuse appears to be directly linked to depression, other mental illness, and mental

healthcare utilization. The relationship between IPV and depression, however, may be largely mediated through physical symptoms, possibly leading to less interest and acceptance of mental health care. Potentially, abuse by an intimate partner may make one less likely to experience distress as a mental health issue and more as a physical issue than if abuse had occurred in childhood. Both child abusers and batterers try to convince their victims that they are “crazy” and that they are to blame for the abuse. However, society (including adult victims) may find it easier to see how a child did not cause the abuse or how she was powerless to stop it. Primary-care providers themselves admit that they have difficulty empathizing with women who remain in abusive relationships.<sup>30</sup> Because of these factors, IPV survivors may have greater fear than survivors of childhood abuse that a mental health symptom or mental health referral may mean that they are crazy, that their provider believes they are crazy, or that their abuser had been right in what he or she said. It is also possible that women in abusive relationships are less able to access mental health care when an abusive partner objects to and impedes their attempts to seek mental health care because they fear that the victim may discuss the abuse.<sup>31</sup>

We did not ascertain what proportion of participants was currently in abusive relationships or how many had had partners impeding their health care. However, a previous study that recruited participants from the same clinic found that the vast majority of women reporting a lifetime history of IPV were no longer in the abusive relationship, with a median of 14 years since the last physical assault.<sup>10</sup> There may also be differences in how mental health professionals treat survivors of IPV versus childhood abuse or how survivors view the mental health field. Although it is difficult to document, many in the grass-roots domestic-violence activist movement have criticized the mental health system for overly pathologizing IPV victims.

Our study has several important implications. First, when seeing patients with depression symptoms or multiple physical symptoms, providers should specifically elicit histories of IPV and childhood abuse. They should openly discuss the patients’ beliefs about the relationship between their abuse history and their current physical and mental health symptoms. Providers should discuss patients’ concerns about referrals to mental health providers or use of antidepressants, especially in women with a history of IPV, who may be focused more on physical rather than mental health symptoms. Future studies should explore why IPV survivors are less likely to receive mental health care than other women with similar degrees of depressive symptomatology and how to decrease patient, provider, or system-level barriers to care for IPV survivors.

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**TABLE 1**

Sample Characteristics

	Total (N=380)	No IPV (N=239)	IPV (N=127)	No Childhood Abuse (N=228)	Childhood Abuse (N=130)	P
Age, years, mean	51.0	51.8	49.4	52.4	49.0	0.05
White, non-Hispanic	84%	84%	83%	85%	80%	NS
Physical child abuse	23%	17%	34%	N/A	N/A	N/A
Sexual child abuse	29%	21%	43%	N/A	N/A	N/A
IPV	30%	N/A	N/A	20%	46%	<0.001
PHQ-15 score, mean	10.6	9.2	13.4	9.4	12.9	<0.001
HCL-20 score, mean	0.9	0.8	1.3	0.8	1.2	<0.001
At least mild depressive symptoms	38%	29%	53%	28%	55%	<0.001
History of psychosis	5%	4%	6%	2%	9%	0.003
Using antidepressants	44%	41%	50%	35%	47%	<0.001
Care from mental health provider	18%	19%	17%	12%	28%	<0.001

IPV: intimate-partner violence; PHQ-15: Physical Symptom Scale of the Patient Health Questionnaire; HCL-20: Depressive Symptom Scale of the Hopkins Symptom Checklist; NS: not significant; N/A: not applicable.

TABLE 2

Intimate-Partner Violence (IPV), Childhood Abuse, and Health Outcomes

	At Least Mild Depressive Symptoms		At Least Mild Depressive Symptoms (With Adjustment for Health Factors)		Severity of Physical Symptoms		Severity of Physical Symptoms (With Adjustment for Health Factors)	
	OR	p	OR	p	$\beta$	SE	$\beta$	SE
Lifetime IPV	2.14	0.002	1.10	NS	3.30	0.60	1.90	0.51
Childhood abuse (physical and/or sexual)	3.01	<0.001	2.09	0.01	2.52	0.60	0.91	0.51
Severity of depressive symptoms	—	—	N/A	N/A	—	—	3.84	0.30
Severity of physical symptoms	—	—	1.32	<0.001	—	—	N/A	N/A
History of psychosis	—	—	1.26	0.33	—	—	1.41	1.1

Multivariate analyses assessing independent associations between IPV, childhood abuse, and health outcomes (depressive and physical symptoms). All analyses are also adjusted for age and race/ethnicity. Depressive symptoms were measured with the Depression scale of the Hopkins Symptoms Checklist (HSCL-20). Participants with an HSCL-20 score  $\geq 1.0$  were considered to have at least mild depressive symptoms. Physical symptoms were measured with the Physical Symptoms Scale of the Patient Health Questionnaire (PHQ-15).

OR: odds ratio;  $\beta$ : beta coefficient; SE: standard error; N/A: not applicable; NS: not significant.

**TABLE 3**  
Intimate-Partner Violence (IPV), Childhood Abuse, and Mental Health Utilization Outcomes

	Current Care From Mental Health Provider		Current Care From Mental Health Provider (With Adjustment for Health Factors)		Current Antidepressant Use		Current Antidepressant Use (With Adjustment for Health Factors)	
	OR	P	OR	P	OR	P	OR	P
Lifetime IPV	0.54	0.07	0.48	0.04	1.10	NS	0.74	NS
Childhood abuse (physical and/or sexual)	3.41	<0.001	2.44	0.007	2.52	<0.001	1.86	0.02
Severity of depressive symptoms	—	—	1.64	0.03	—	—	1.88	0.001
Severity of physical symptoms	—	—	0.99	0.8	—	—	1.04	NS
History of psychosis	—	—	5.31	0.005	—	—	4.10	0.04

Multivariate analyses assessing independent associations between IPV, childhood abuse, depressive and mental health services utilization outcomes (whether or not participant is receiving care from a mental health provider or taking an antidepressant.) All analyses were also adjusted for age and race/ethnicity. Depressive symptoms were measured with the Depression Scale of the Hopkins Symptom Checklist (HSCl-20). Physical symptoms were measured with the Physical Symptoms Scale of the Patient Health Questionnaire (PHQ-15).

OR: odds ratio; NS: not significant.