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Commission Versus Receipt of Violence During Pregnancy: Associations With Substance Abuse Variables

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Abstract

The tendency for women to report both commission and receipt of violence is an understudied phenomenon. In particular, little is known about individual differences as a function of commission vs. receipt of partner violence among pregnant women. Using a sample of 78 cohabiting low-SES pregnant women, the current study examines three violence subtypes based on self-report (primarily commission of violence, primarily receipt of violence, and no report of violence) and investigated differences in a range of other risk factors among these subtypes. In this sample, 47% reported higher levels of intimate partner violence (IPV) perpetration than victimization; 14% reported more IPV victimization than perpetration; and 39% reported no IPV. Results demonstrate clear differences between women reporting IPV and those not reporting IPV and clear differences between IPV subtypes in terms of partner substance use, with women reporting primarily receipt of violence also reporting more drug and alcohol abuse by their partners. Although preliminary, these findings suggest that the commission of violence may be more common during pregnancy than the receipt of violence, but that risks for these two subgroups are similar.

Keywords

substance abuse; pregnancy; risk factors; intimate partner violence

Recent surveys of women in the United States have estimated the lifetime prevalence of intimate partner violence (IPV) to be between 18.4% and 29.4% (Breiding, Black, & Ryan, 2008). Some evidence suggests that these rates do not diminish during pregnancy. For example, Altarac and Strobino (2002) found that 14% of 808 women at an urban hospital reported physical abuse during pregnancy. In a study with a more rural sample of primarily White and lower SES women, Bailey and Daugherty (2007) obtained report of some type of IPV in 81% of women during their current pregnancy, with 28% of the 104 women specifically reporting physical abuse. Comparing these rates to 12-month prevalence rates among nonpregnant women suggests that pregnancy may not offer any hiatus from violence (Elliott & Johnson, 1995).

Violence during pregnancy is associated with substantial risks for both mother and fetus. For example, a recent study of pregnant women suggested an association between physical IPV

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and the use of nicotine, alcohol, marijuana, and harder illicit drug use during pregnancy. Although these data are not causal, they underscore the importance of IPV screening during pregnancy, as IPV may increase the risk for poor pregnancy outcomes, such as preterm delivery, low birth weight, fetal damage, and miscarriage, or reflect the presence of other teratogenic risk factors, such as substance abuse (Bailey & Daugherty, 2007; Campbell, 2002; Chambliss, 2008; Coker, Sanderson, & Dong, 2004; Sharps, Laughon, & Giangrande, 2007).

The prevalence and risks associated with IPV during pregnancy serve to underline the importance of screening and intervention during this period. However, intervention attempts must confront substantial heterogeneity in the causes, consequences, and nature of violence between couples as well as in the characteristics of the couples involved (e.g., Capaldi & Kim, 2006; Holtzworth-Munroe & Meehan, 2004). One potentially important way violence between couples differs is in the extent to which each partner exhibits violent behavior. Popular stereotypes of women as invariably passive victims of violence have long since been dispelled by data indicating that both men and women exhibit violence in intimate relationships (Straus, 1999). Swan and Snow (2002) examined the role of women involved in IPV and found that 50% of women reported both receiving and engaging in violence, whereas 34% reported receiving violence only, and the minority, 12%, reported being the only partner to engage in violence. A more recent study examining the prevalence of IPV in a sample of couples from the Pacific Islands found that mothers were as likely as fathers to commit and to be victims of physical violence (Schluter, Paterson, & Feehan, 2007).

These data do not change the clear fact that tremendous numbers of women are victimized by intimate partners each year and are injured by men far more often than men are by women (Breiding et al., 2008). They do, however, suggest a potentially important dimension along which IPV may differ. The characteristics and consequences of IPV may differ as a function of the woman's contribution to the violence, and these differences may have clear implications for screening and intervention. There is a notable lack of data on individual or contextual differences as a function of the woman's relative level of violence, and this is particularly true among pregnant women (Amar, 2007; Houry et al., 2008). Furthermore, although the context and meaning of violence can differ tremendously for men and women (e.g., defensive vs. aggressive violence; see Carney, Buttell, & Dutton, 2007; Saunders, 1986), the frequency of violence is perhaps its most salient dimension and is a dimension on which professionals in the community base many of their judgments regarding risk (Ballard et al., 1998; Roehl, O'Sullivan, Webster, & Campbell, 2005).

The goal of this study was thus to examine correlates of different patterns of IPV among pregnant women. Specifically, we sought to determine (a) whether levels of substance abuse (by the woman and her partner), depression, and/or social isolation were higher for women who reported receiving more violence than they committed and (b) the extent to which these factors differed for either subgroup (those reporting more commission of violence or those reporting more receipt of violence) versus for women who reported no IPV in the past year.

Method

We used a cross-sectional study of IPV cases among adult female patients seen at an urban prenatal clinic. Our sample included 100 low-income, predominantly African American pregnant women (94%) receiving routine prenatal care in an urban hospital setting. In this sample, 33% were college graduates, 62% were currently receiving food stamps, 13% were receiving disability assistance, 6% were receiving unemployment assistance, and 26% of pregnancies were planned.

Women were approached in the waiting room of a prenatal clinic. Eligibility criteria included being less than 7 months pregnant, being between the ages of 18 and 45, and currently receiving prenatal care. Those meeting criteria and providing informed consent completed a 45-min assessment battery using an audio-enhanced computer-assisted self-interview (A-CASI) to complete the measures. All procedures were approved by the Wayne State University Institutional Review Board.

All assessment measures were delivered with an easy-to-use Tablet PC; participants were provided headphones to insure privacy. IPV was assessed using the Conflict Tactics Scale-2 (CTS-2). The CTS-2 is a self-report measure that assesses the frequency of relationship violence and has demonstrated good validity and reliability (Straus, Hamby, Boney-McCoy, & Sugerman, 1996). For the purposes of our analyses, each item was coded as either describing an act of IPV "receipt" or "commission," and this distinction was used to categorize each participant into the following group categories: mostly receipt of violence (victim), mostly commission of violence (perpetrator), or no IPV. For example, "I beat up my partner" was coded as an item reflecting commission of violence, whereas "my partner beat me up" was coded as reflecting receipt of violence. Any difference in number of items endorsed for receipt versus commission resulted in being coded as primarily that group. For example, a participant who endorsed 4 receipt items and 2 commission items would be placed in the "mostly receipt" group, whereas a participant who endorsed 2 receipt items and 4 commission items would be placed in the "mostly commission" group. Ties were considered indeterminate and were dropped from further analyses. Based on Straus' (1993) evaluation of the National Family Violence Survey, we used the following categories of violence: very serious violence (i.e., beat up, use knife or firearm), serious violence (punch, kick, bite, choke, hit with object, threat of weapon), and minor violence (throw something, push, grab, shove, slap). In addition to actual occurrence of violence, we conducted additional analyses examining frequencies (CTS means) of perpetration and levels of violence.

All women completed a battery of questions regarding their past-year alcohol and drug use as well as their partner's past-year alcohol and drug use. Items from the Alcohol Use Disorders Identification Test (AUDIT) were used to create a categorical variable indicating the level of alcohol use (none/low use, high use). Personal and partner use of drugs other than alcohol were assessed using a series of individual questions designed for the purposes of this study. Depression was assessed with the Center for Epidemiologic Studies Depression Scale (CES-D), which measures symptoms of depression in the past week. Social isolation was measured using the Social Provisions Scale, which is an assessment of global, perceived social support (Cutrona & Russell, 1987).

Results

IPV Group Status and Classification

Of the total sample of 100 participants, 78 (78%) reported having a partner currently. Of those, 5 (5%) reported equal levels of violence receipt and commission and were dropped from further analyses. Of the remaining 73 women, 47% reported higher levels of IPV commission than receipt, 14% reported more IPV receipt than commission, and 39% reported no IPV. Mean CTS scores and rates of very serious violence were calculated for the two violence subgroups. An independent samples *t* test revealed that those who reported receipt of violence had significantly higher CTS scores—$M = 0.58$, $SD = 0.41$—than those reporting commission of violence—$M = 0.33$, $SD = 0.35$; $t(45) = -2.02$, $p < .05$ (see Table 1). Analyses revealed no significant differences across levels of violence between subgroups (e.g., the extent to which couples engaged in very serious violence vs. minor violence, etc.).

IPV Group Status and Other Risk Factors

Pearson's chi-square analyses were conducted to compare self-reported drug use, problem alcohol use, and depression scores of women reporting more receipt versus more commission of violence. Results suggested no significant differences between these two groups of women. However, this may be a function of the small sample size in this exploratory study, as calculated odds ratios (ranging from 1.1 to 2.8) suggested higher reporting of risk factors among women primarily reporting victimization (see Table 2). Specifically, women reporting more receipt than commission of violence were 1.5 times more likely to report using drugs, 2.2 times more likely to report higher levels of depression, and 2.8 times more likely to report partner alcohol abuse. Differences on these variables between women reporting any IPV versus no IPV were also nonsignificant. Independent samples *t* test analysis revealed no significant differences in perceived social support across subgroups of violence.

Although women reporting IPV did not report increased rates of personal drug use, they did report increased rates of partner drug use. Specifically, women reporting more receipt than commission of violence were 5 times more likely to report partner drug use than women reporting no IPV, and this difference was significant (54% vs. 19%), $\chi^2(2, N = 14) = 6.6$, $p < .05$. There were no significant differences between the two IPV subtypes in reports of partner drug use (see Table 2).

Logistic regression analysis was used to assess bivariate associations between IPV and risk factors (drug use, problem alcohol use, depression, partner drug use, partner problem alcohol use) adjusting for demographic variables (race and receipt of food stamps). Results did not differ significantly from reported Pearson's chi-square analyses. Following the American Psychological Association recommendation of using minimal sufficient statistics, we chose to report results from the chi-square analyses including odds ratios (OR) and confidence intervals (CI).

Discussion

In this sample of pregnant, predominantly African American women with current partners, 61% reported experiencing some type of IPV; within those reporting any IPV, 47% reported committing more violence than they received. There was a significant difference in mean couple violence scores between the two subgroups, with victims having higher overall couple violence scores than perpetrators. Women reporting more receipt than commission of violence were also 5 times more likely to report drug use by their partner and 2.8 times more likely to report partner alcohol abuse. Although other differences were nonsignificant, all suggested that women who are primarily recipients of violence may be more likely to report problematic and/or harmful behaviors.

These findings have several implications. First, women in our sample reported extremely high rates of IPV in the past year (61% reported experiencing some type of commission or receipt of violence). These rates may reflect increased risk associated with pregnancy (Bohn, 1990) and low socioeconomic status (Lewis, 1988). The health consequences for pregnant women who experience IPV are substantial and include poor physical, sexual, and mental health outcomes, including depression (Plichta & Falik, 2001). Clearly, prevention and treatment efforts aimed at this at-risk population are imperative.

However, our findings also indicate that although the prevalence of any violence in the past 12 months was very high, severe victimization (e.g., getting beat up, use of a knife or firearm) was uncommon, occurring in only 8% of participants. The most frequent reports of violence were relatively minor: 85% reported either pushing or being pushed, and 75%

reported either grabbing or being grabbed by a partner. Furthermore, only 2% of all participants reported feeling unsafe currently, and perceived social support among the IPV subgroups did not differ from that of women reporting no violence in their intimate relationship. In general, these findings are consistent with literature suggesting that partner violence often fails to fit expected patterns (Johnson, 2006).

Second, these findings suggest that some of the risks commonly associated with IPV are not appreciably less among women who report committing more violence than they receive. This is important as it suggests that violence itself may be a key marker of other risks, independent of whether that violence is primarily by a man against a woman or vice versa. Results may also suggest a broader environmental risk which increases the chance of a variety of problematic behaviors. In our sample of predominantly Black (94%), low socioeconomic status, urban women (where 62% of women reported currently receiving food stamps), risk factors such as substance use, depression, perceived social support, and violence may be related and likely have similar correlates, reflecting a broader, high-risk environment rather than a specific, independent risk pathway. For example, previous studies have suggested that ethnicity and income are risk factors for IPV (Campbell & Soken, 1999; Lewis, 1988). In our analyses, the lack of significant differences between violence subgroups may be reflective of this shared high-risk environment. Future work should consider the extent to which violence in general—apart from victimization of one partner by another—may be a salient marker of overall risk. Interventions aimed at the prevention and treatment of IPV may benefit from a systematic approach, focusing on broad environmental risk, rather than on specific types of violence or substance use.

Finally, these findings are consistent with a large literature suggesting that substance abuse by a man is associated with greater likelihood of violence toward an intimate partner (Chermack & Taylor, 1995; Testa, 2004). Intoxicating doses of alcohol or drugs are related to aggressive behavior, such as physical violence of men toward women (Easton, 2005; Swanson et al., 1990). One study suggested that such violence typically occurs within 2 hr after the onset of intoxication (Fals-Stewart, Golden, & Schumacher, 2003).

Limitations of the current study must be acknowledged, including our small sample size. Furthermore, our results may be indicative of the nature of our urban sample and may not be generalizable to other samples. Future work is needed in more diverse populations of women in the perinatal period. Our sample included women at various gestational time points, and, apart from meeting minimal inclusion criteria, specific information regarding the point at which women were receiving prenatal care is unknown. Women who experience IPV are less likely to obtain proper prenatal care, with one study suggesting that these women were twice more likely to delay receiving prenatal care than were women who did not experience IPV during pregnancy (Chambliss, 2008; Dietz, 1997).

Endorsement of IPV was by participants' self-report. Although a recent study suggested that the use of self-report measures identified more prenatal women who experienced IPV than did direct question methodology (Rhodes et al., 2006), there exists the potential for underreporting due to sensitivity of disclosure. In addition, although previous research demonstrates that IPV victims can accurately report their partners' alcohol use, additional studies examining the accuracy of reporting partner drug use are warranted (Lindquist et al., 1997; McNagny & Parker, 2002).

Although we aimed to assess frequencies of IPV and risk factors (substance use, depression) during pregnancy, the items included the potential for assessing occurrence of these behaviors prepregnancy (in the past 12 months); although this is a potential confound,

prepregnancy behaviors can often predict continued behaviors, such as alcohol use, during pregnancy (Harrison & Sidebottom, 2008).

Finally, the current study was unable to account for contextual factors surrounding the occurrence of IPV. For example, it is possible that violence which occurs in self-defense has a different meaning than unprovoked violence (Carney et al., 2007; Dutton & Goodman, 2005; Saunders, 1986; Swan & Snow, 2002). Similarly, violence that occurs under the influence of alcohol or drugs may differ from violence that occurs while the perpetrator is sober (Kantor & Straus, 1989; Silverman, Raj, Mucci, & Hathaway, 2001). Although a full discussion of these issues is beyond the scope of this brief report, future research should consider these contextual issues, rather than simply counting individual occurrences of IPV.

The present analysis is unique in that, to our knowledge, it is the first to compare correlates for a sample of pregnant women who primarily commit violence with an intimate partner versus those primarily victimized by such violence. The finding that patterns of external correlates are similar for these two subgroups is important, as it suggests that the risks associated with IPV extend equally to women who do not fit common stereotypes.

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Biography

Golfo K. Tzilos is a clinical psychology doctoral student at Wayne State University. Her doctoral research investigates the use of brief, computer-based intervention alcohol use in pregnant women. Her clinical and research interests are in the area of prevention and treatment of substance use disorders.

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CDC and three NIDA research grants focusing on the development and validation of technology-based brief interventions.

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Table I

Mean Levels of IPV (*SD*) Among Women Who Report Having a Partner as Revealed by Independent Samples *t* Test

	Violence Subgroups	
	Commission > Receipt	**Receipt > Commission**
Frequency of IPV	0.33 (0.35)	0.58 (0.41)*
Frequency of very serious violence	0.04 (0.13)	0.10 (0.17)

Note: IPV = intimate partner violence; SD = standard deviation.

* $p < .05$.

Table 2

Presence of Key Risk Factors Among Violence Subgroups (N = 45)

	Violence Subgroups				
Risk Factor	**Commission > Receipt**	**Receipt > Commission**	**OR (CI)[a]**	**No Violence**	**OR (CI)[b]**
Drug use	10 (50%)	4 (20%)	1.5 (0.36–6.20)	6 (30%)	1.5 (0.66–3.57)
Problem alcohol use	11 (50%)	3 (14%)	1.1 (0.35–3.65)	8 (36%)	1.1 (0.55–2.42)
Depression	16 (46%)	7 (20%)	2.2 (0.54–8.81)	12 (34%)	1.2 (0.74–2.15)
Perceived social support	23 (51%)	7 (16%)	1.3 (0.62–3.32)	15 (33%)	1.3 (0.87–2.01)
Partner drug use	16 (54%)	5 (19%)	5.0 (1.30–19.2) *	6 (27%)	2.3 (1.05–5.06)
Partner problem alcohol use	8 (36%)	6 (27%)	2.8 (1.13–7.80)	8 (36%)	1.2 (0.55–2.42)

Note: OR = odds ratios; CI = confidence interval. Problem alcohol use, drug use, and partner drug use were categorical variables (yes/no); partner problem alcohol use was a categorical variable (four or more drinks in a row); depression and perceived social support were determined by median split.

[a] Between violence subgroups, comparing commission > receipt group to receipt > commission group; referent = receipt subgroup.

[b] Between groups, comparing all violence group to no violence group; referent = no violence group.

* $p < .05$.