Published in final edited form as:

Partner Abuse. 2014 October ; 5(4): 407–419.

Examining the Prevalence, Bidirectionality, and Co-Occurrence of Sexual Intimate Partner Violence among Women During Pregnancy and Postpartum

Julianne C. Hellmuth, Ph.D.^a, Véronique Jaquier, Ph.D.^b, Kristina Coop Gordon, Ph.D.^c, Todd M. Moore, Ph.D.^c, and Gregory L. Stuart, Ph.D.^c

^aMedical University of South Carolina

^bYale University School of Medicine

^cUniversity of Tennessee-Knoxville

Abstract

Objectives—This longitudinal study examined the prevalence of women’s sexual intimate partner violence (IPV) perpetration, the extent to which women experienced both sexual IPV victimization and perpetration, and the overlap between women’s experiences of sexual IPV with psychological and physical IPV victimization and perpetration.

Methods—Data were collected via self-report survey from 180 women during the first 18 weeks of pregnancy and 122 participants completed follow-up assessments at six weeks postpartum.

Results—At both time points, the prevalence of sexual IPV victimization and perpetration were similar in this sample. Bidirectional sexual IPV was more common than sexual IPV victimization or perpetration only. The majority of participants who experienced sexual IPV victimization at baseline and follow-up also experienced psychological or physical IPV victimization. No participants at either time point reported sexual IPV perpetration only, those participants who perpetrated sexual IPV also perpetrated psychological or physical IPV.

Conclusions—Future research should investigate women’s sexual IPV victimization and perpetration as they relate to other areas of mental and physical health during this time period.

Keywords

Intimate partner violence; sexual coercion; women’s use of aggression; pregnancy; postpartum

The literature examining intimate partner violence (IPV) during pregnancy and postpartum has grown tremendously in recent years, yet it remains limited in three important ways. First, it has primarily focused on exploring factors associated with women’s psychological and physical IPV victimization (Brownridge et al., 2011; Hellmuth, Gordon, Stuart, & Moore, 2013; MacMillan et al., 2009). Fewer studies have examined the prevalence or

Correspondence concerning this article should be addressed to Julianne C. Hellmuth, Department of Psychiatry and Behavioral Sciences, Division of Clinical Neuroscience, Medical University of South Carolina, 5 Charleston Center Drive, Charleston, SC 29401. Hellmuth@musc.edu. Telephone: (843) 792-5569.

correlates of sexual IPV victimization. These studies documented rates ranging from 7–20% (Amaro, Fried, Cabral, & Zuckerman, 1990; Bailey & Daugherty, 2007; Kiely, El-Mohandes, El-Khorazaty, Blake, & Gantz, 2010; Miller et al., 2010), similar to rates of sexual IPV victimization reported in a recent national probability study of IPV among women in the U.S. (Breiding, Black, & Ryan, 2008). Second, only two studies to our knowledge have examined the prevalence and correlates of women's IPV perpetration during pregnancy and postpartum (Hellmuth, Gordon, Stuart, & Moore, in press; Tzilos, Grekin, Beatty, Chase, & Ondersma, 2010). Both studies found that like many women in non-expectant populations (see Langhinrichsen-Rohling, Selwyn, & Rohling, 2012, for review), some pregnant and postpartum women use psychological and physical IPV as frequently and severely as they experience IPV victimization. However, neither of these studies examined women's sexual IPV perpetration. Finally, in the general population, sexual IPV victimization frequently co-occurs with psychological and physical IPV victimization (Hines & Saudino, 2003; Logan, Cole, & Shannon, 2007; Sullivan, McPartland, Armeli, Jaquier, & Tennen, 2012). However, research has not yet examined the extent to which various types of IPV victimization and perpetration (i.e. psychological, physical, and sexual) co-occur among women during pregnancy and postpartum.

It is critical to explore the characteristics of sexual IPV in this population because sexual IPV victimization often accounts for negative consequences among women more than other types of victimization (Bennice, Resick, Mechanic, & Astin, 2003; Bonomi et al., 2006). Some researchers also have suggested that the severely negative impact of sexual IPV victimization may be related to its etiology, which may, for some individuals, differ from the more common etiologies of psychological and physical IPV (Bonomi et al., 2006; Ellsberg, Jansen, Heise, Watts, & Garcia-Moreno, 2008). The existing theories that have attempted to explain sexual IPV against women in the general population (see Hines, 2007, for review) focus largely on gender and have argued that men perpetrate sexual IPV against a female partner in order to gain or retain dominance over her. Similarly, feminist, evolutionary, and social cognitive theory have asserted that men perpetrate IPV against a pregnant partner to retain reproductive control over her, or in response to threats to the security of their dyadic relationship (Gangestad, Thornhill, & Garver, 2002; Goetz & Shackelford, 2009; Harris, 2003; Moore, Frohworth, & Miller, 2010).

Recent findings from studies of IPV during pregnancy and those in the general population suggest that those theories may only partially explain the occurrence of more severe physical IPV victimization (Hellmuth et al., 2013). One prominent argument suggesting weaknesses in the aforementioned theoretical frameworks is that IPV of all forms (i.e. psychological, physical, and sexual) is often bidirectional, meaning that both partners within a dyad perpetrate IPV and experience IPV victimization (Hellmuth et al., in press; Langhinrichsen-Rohling et al., 2012; Straus, 2008). Regarding sexual IPV specifically, Hines (2007) found that men and women shared similar etiologies for sexual coercion against opposite sex partners: hostility toward the opposite sex and social status of one's gender. Indeed, some existing theories have suggested that the central risk factors for sexual IPV (e.g. hostility, dominance, or sexual propriety) are found only among men. However, these more recent findings suggest that existing theories explaining sexual IPV may be incomplete because

both men and women demonstrate these characteristics and both men and women perpetrate sexual IPV.

Some researchers assert that the bidirectionality of IPV does not necessarily indicate that men and women perpetrate IPV for the same reasons or with similar negative effects (Swan, Gambone, Van Horn, Snow, & Sullivan, 2012). However, the bidirectionality of IPV, and sexual IPV in particular if such findings emerge among pregnant and postpartum women, may suggest the need for a more nuanced conceptual model (one not limited to explaining male perpetration alone) to explain IPV as most women experience it during this time period. Similar incidence rates of sexual IPV victimization and perpetration among pregnant and postpartum women could imply that more comprehensive theoretical explanations of IPV that take into account women's victimization and perpetration are necessary. Therefore, the present study examined the prevalence and bidirectionality of women's sexual IPV victimization and perpetration during pregnancy and at six weeks postpartum. We also examined the extent to which women who experience sexual IPV also experience psychological and physical IPV.

Method

Study Participants

A sample of 180 women in their first 18 weeks of pregnancy was recruited from two university affiliated health clinics. These data were drawn from a larger study of women's wellbeing during pregnancy. For a full description of study methods and sample characteristics, please refer to (insert author self citation here). Inclusion criteria dictated that all study participants spoke and read English fluently, were at least 18 years of age, and had contact with either their intimate partner or child's father at least once per month. If a woman had no intimate partner and no contact with their child's father, she was considered ineligible for participation. Participants also completed follow-up assessments approximately six weeks postpartum. The follow-up assessment was identical to that administered at baseline. Sixty-six percent ($n=122$) of the participants completed follow-up assessments. Participants who completed follow-up assessments were compared to those who did not on the severity of their IPV experiences and demographic variables. These analyses revealed that relationship length was the only variable that differentiated those who completed follow-up assessments from those who did not; those who completed follow-up had a mean relationship length of 40 months ($SD=45.71$) and those who did not complete follow-up had a mean relationship length of 24 months ($SD=27.72$).

Recruitment and Assessment Procedures

All procedures were approved by the IRBs of the investigators' home institution and the recruitment sites. Nurses and nurse practitioners who were members of the primary care team facilitated recruitment. Women who met eligibility criteria and provided informed consent completed self-report surveys and interviews in the privacy of their exam room with a trained female research assistant. Women in their first 18 weeks of pregnancy were invited to participate. Follow-up assessments were conducted approximately six weeks postpartum. Participants were remunerated with a \$25 gift card at each time point.

Measures

The Revised Conflict Tactics Scales (CTS-2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996; Straus, Hamby, & Warren, 2003) was employed to measure participants' sexual, psychological and physical IPV victimization and perpetration. The reference period at baseline was the time since her pregnancy began. The reference period at follow-up was the time period since her baseline assessment was completed. The original CTS-2 sexual IPV victimization and perpetration subscales include seven items each. However, for the purposes of this study, this subscale was modified and the items that assessed victimization and perpetration by preventing condom use were dropped (CTS-2 items 16 and 15, respectively). Thus, the sexual IPV victimization and perpetration subscales consisted of six items each and demonstrated adequate reliability (Cronbach's $\alpha = .72$ and $\alpha = .77$, respectively). Psychological and physical IPV victimization and perpetration were also assessed. Participants' psychological IPV victimization and perpetration was the sum of eight items indicating psychological IPV victimization (Cronbach's $\alpha = .84$) or perpetration (Cronbach's $\alpha = .74$). Participants' physical IPV victimization and perpetration was the sum of the 12 items indicating physical IPV victimization (Cronbach's $\alpha = .92$) or perpetration (Cronbach's $\alpha = .91$).

Results

Prevalence of sexual IPV victimization and perpetration during pregnancy and postpartum

At baseline, 21 women (11.7%) endorsed at least one instance of sexual IPV victimization and 17 (9.4%) endorsed at least one instance of sexual IPV perpetration. At follow-up, 15 women (12.3%) endorsed at least one instance of sexual IPV victimization and 9 (7.4%) endorsed at least one instance of sexual IPV perpetration. The prevalence of each item response from the sexual IPV victimization and perpetration subscales are presented in Table 1. In each category except for two (i.e. using threats for sex and using force for oral/anal sex), a greater number of women reported sexual IPV victimization than sexual IPV perpetration. The most frequently endorsed sexual IPV victimization and perpetration items at baseline and follow-up were CTS-2 items which assess whether participants or their partner "Insisted on sex when my partner did not want to, but did not use physical force". The second most frequently endorsed sexual IPV victimization and perpetration items at baseline and follow-up were CTS-2 items which assess whether participants or their partner "Insisted on oral or anal sex, but did not use physical force". At both baseline and follow-up, a greater number of women endorsed victimization by sexual coercion and coercion to obtain oral or anal sex than perpetration of these behaviors. The least frequently endorsed items were those that assessed whether participants were threatened or used threats or force for sex, oral, or anal sex.

Changes in prevalence of sexual IPV victimization and perpetration over time

Sexual IPV victimization and perpetration experiences also changed for some women in our sample from baseline to follow up. Eight participants (6.6%) reported that they experienced sexual IPV victimization at baseline, but not at follow-up. Nine participants (7.4%) reported that they experienced sexual IPV victimization at follow-up, but not at baseline. Six participants (4.9%) reported that they experienced sexual IPV victimization at both baseline

and follow-up. Nine participants (7.4%) in our sample reported that they perpetrated sexual IPV at baseline, but not at follow-up. Eight participants (6.6%) reported that they perpetrated sexual IPV at follow-up, but not at baseline. One participant reported that she perpetrated sexual IPV at both baseline and follow-up (0.8%). Post-hoc Wilcoxon signed rank tests suggested that the differences between the median scores for sexual IPV victimization ($Z=-.37$, $p=.71$) and sexual IPV perpetration ($z=-.22$, $p=.83$) were not significantly different from baseline to follow-up.

Bidirectionality of sexual IPV

At baseline, two participants (1.1%) reported sexual IPV perpetration, but no sexual IPV victimization. Eight women (4.4%) reported sexual IPV victimization, but no sexual IPV perpetration. Thirteen women (7.2%) reported that they had both perpetrated sexual IPV and experienced sexual IPV victimization. At follow-up, two women (1.6%) reported sexual IPV perpetration but no sexual IPV victimization. Seven women (5.7%) reported sexual IPV victimization, but no sexual IPV perpetration. Another seven women (5.7%) reported that they had both perpetrated sexual IPV and experienced sexual IPV victimization.

Co-occurrence of sexual IPV with other types of IPV

In our sample, few participants experienced sexual IPV victimization or perpetration in the absence of other types of IPV. At baseline, three participants (1.7%) experienced sexual IPV victimization only. Eighteen participants (10.0%) experienced a combination of both sexual IPV victimization and psychological or physical IPV victimization. No participants reported sexual IPV perpetration only, but 17 participants reported that they had perpetrated both sexual IPV and psychological or physical IPV (9.4%). At follow-up, two participants (1.6%) experienced sexual IPV victimization only, and 13 participants (10.7%) experienced it with psychological or physical IPV victimization. One participant (0.8%) perpetrated sexual IPV only, and eight participants (6.6%) reported that they had perpetrated both sexual IPV and psychological or physical IPV.

Discussion

To our knowledge, this study was the first to explore the prevalence and bidirectionality of sexual IPV in a sample of women during pregnancy and postpartum. Participants in our sample reported similar rates of sexual IPV victimization compared to findings from other studies (Amaro et al., 1990; Bailey & Daugherty, 2007; Kiely et al., 2010). Our findings add to the existing literature by providing the first prevalence estimate of pregnant women's sexual IPV perpetration. To date, both sexual IPV by non-expectant women and IPV perpetration by pregnant women have remained drastically understudied. Findings from this exploratory study provide a platform for future research to examine correlates and predictors of sexual IPV during pregnancy and postpartum.

Compared to rates of women's psychological and physical IPV perpetration during pregnancy and postpartum (Hellmuth et al., in press; Tzilos et al., 2010), a substantially smaller proportion of our sample perpetrated sexual IPV. This rate is similar to the prevalence of sexual violence perpetration found in prior studies conducted among college

women (Hines, Krahé, Scheinberger-Olwig, & Bieneck, 2003). Nevertheless, the small number of participants in the present study suggests that our findings should serve as an indicator that future studies employing larger and more representative samples of pregnant women should replicate our findings rather than a generalizable prevalence estimate.

Some participants in our sample used various forms of sexual IPV during pregnancy and postpartum. A very small proportion of our sample used more severe forms of sexual IPV. Based on previous studies documenting that the incidence and chronicity of sexual IPV is typically less than that of psychological and physical IPV (Jaquier, Hellmuth, & Sullivan, 2012; Pico-Alfonso, 2006; Sullivan et al., 2012), it is expected that sexual IPV would be less prevalent in this sample compared to other types of IPV. Because sexual IPV perpetration among pregnant women has not been examined prior to our study, and because sexual IPV victimization among men whose female partners are pregnant has never been investigated to our knowledge, the findings of this exploratory study may facilitate future research. Specifically, our study documented the occurrence of women's sexual IPV perpetration during pregnancy and, therefore, a need for future studies to replicate our findings and assess correlates and predictors of this type of IPV during pregnancy. Considering the negative consequences of IPV documented among both men and women (Hines & Douglas, 2009, 2012), the risk of IPV related victimization and injury that women incur when they perpetrate IPV (Abel, 2001; Hamberger, 2005; Sullivan, Meese, Swan, Mazure, & Snow, 2005), and the substantial risks for both mother and child associated with IPV during pregnancy and postpartum (Bailey & Daugherty, 2007; Flynn & Chermack, 2008; Goedhart, van der Wal, Cuijpers, & Bonsel, 2009; Morland, Leskin, Block, Campbell, & Friedman, 2008), our findings suggest that additional research is needed to determine the prevalence and scope of sexual IPV victimization and perpetration among expectant couples.

Like findings from previous studies investigating the bidirectionality of psychological and physical IPV during pregnancy and postpartum (Hellmuth et al., in press; Tzilos et al., 2010), similar proportions of participants reported sexual IPV victimization and sexual IPV perpetration in this exploratory study. Additionally, we found that most participants in our study who perpetrated sexual IPV also experienced sexual IPV victimization, although a smaller number of participants experienced victimization only or perpetration only. These findings emphasize the heterogeneity of women's experiences of sexual IPV during pregnancy and postpartum, although the exploratory nature of our study prevents us from fully characterizing and contextualizing sexual IPV that occurred within this sample. Further, these findings suggest that future research should aim to investigate alternative motivations for men's and women's use of IPV during pregnancy and postpartum. In some cases, bidirectionality of IPV within a dyad may be related to (although not the single predictor of) the etiology of IPV in that relationship (Johnson, 1995). Therefore, the bidirectionality of sexual IPV in our study may occur for reasons other than those explaining the bidirectionality of physical or psychological IPV (Hines, 2007). For example, whereas women's psychological and physical IPV perpetration have often been explained as self-defense (Stuart et al., 2006; Swan et al., 2012), women's use of sexual IPV has been explained as the expression of adversarial sexual beliefs (Hines, 2007). Women with a history of IPV perpetration in addition to IPV victimization might also have different service or intervention needs compared to women with a history of IPV victimization only. This

study did not assess women's motivations for sexual IPV perpetration or the context in which sexual IPV had occurred, but it is important for future research to compare women's motivations for each type of IPV before, during, and after pregnancy. These nuanced profiles highlight the need for future research to develop more comprehensive conceptual models that may explain the experiences of bidirectional IPV during the transition to parenthood. Continuing this line of research should provide more information about differential etiologies of each form of violence that generalize to non-expectant women and that are unique to women around the time of childbirth. This information may, in turn, facilitate the development of effective interventions for women and their families.

Among participants who completed follow-up assessments, prevalence rates of women's sexual IPV perpetration in this study declined between pregnancy and postpartum assessment time points. However, due to the high attrition rate in this study, we cannot document the changes in IPV experienced by women who did not complete follow-up assessments. Although completers and non-completers did not differ on their IPV experiences at baseline, we cannot conclude that changes in IPV during the later stages of pregnancy were unrelated to attrition in our study. Unfortunately, drawing conclusions about why reductions in IPV occurred among study completers is beyond the scope of the present study. One possibility is that participants who completed follow-up assessments were different on some influential factors compared to those who did not complete follow-up assessments. Another possibility is that changes in individual, dyadic, and family dynamics that occur with the birth of a new child may influence changes in the occurrence of IPV (Brownridge et al., 2011; Hellmuth et al., 2013). A critical next step is to attempt to replicate these findings and investigate factors that may be associated with changes in sexual IPV over time among pregnant women. Additionally, future research should aim to assess factors related to changes in sexual IPV during pregnancy and postpartum compared to before women become pregnant. This information would contribute to a more comprehensive understanding of women's IPV experiences and service and intervention needs during the course of their pregnancy.

The present study is limited by a small sample size and potential bias related to using only self-report data. The study is also limited by the absence of corroborating partner reports and an enrollment strategy that focused on recruiting women during the early part of their pregnancy. Future studies should aim to examine women's sexual IPV during pregnancy and postpartum using larger sample sizes, reports of partners and medical staff, and to employ prospective research designs to provide a clearer understanding of how sexual IPV may develop and change over time. Further, conclusions that can be drawn from comparisons of IPV severity from baseline to follow-up are limited due to the difference in time frames of each assessment period. Future studies would be improved by ensuring that assessment time frames are more comparable to provide a clearer estimate of changes over time.

An additional limitation of this study is that some topics known to influence IPV, particularly during pregnancy and postpartum, were not examined in this study. For example, this study did not assess whether our participants' current pregnancy was the result of sexual coercion or sexual IPV. We also did not examine broader forms of reproductive coercion that participants may have experienced prior to or during her current pregnancy.

Considering a substantial body of literature linking these factors to physical and sexual IPV during pregnancy (Goetz & Shackelford, 2009; Miller et al., 2010; Moore et al., 2010), future research should aim to collect this data from both partners to better contextualize the occurrence of sexual and other forms of IPV during pregnancy and postpartum.

In summary, our findings add to the existing literature by examining women's sexual IPV victimization and perpetration, and the co-occurrence of sexual IPV with other types of IPV during pregnancy and postpartum. This study highlights the need for conceptual models considering women's IPV victimization and perpetration to be developed and applied to treatment development efforts. This research is critical in light of the severe negative health impacts of all forms of IPV, particularly during pregnancy and postpartum.

Acknowledgments

This manuscript is the result of work supported, in part, by resources from the National Institutes on Alcohol Abuse and Alcoholism (F31 AA016706-02 and K24AA019707), the National Institute on Drug Abuse (T32DA019426), the National Institute on Child and Human Development and the Office of Research on Women's Health (K12HD055885) and the Swiss National Science Foundation (PBLAP1-140055 and PBLAP1-145873).

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Table 1

Prevalence of Item Responses on Sexual IPV Victimization and Perpetration at Baseline and Follow-up.

Type of IPV	Baseline (n=180)		Follow-up (n=122)	
	Victimization	Perpetration	Victimization	Perpetration
Insisted on sex	17 (9.4%)	12 (6.7%)	11 (9.0%)	8 (6.6%)
Insisted on oral/anal sex	11 (6.1%)	7 (3.9%)	7 (5.7%)	4 (3.3%)
Used threats for sex	1 (0.6%)	2 (1.1%)	1 (0.8%)	1 (0.8%)
Used threats for oral/anal sex	3 (1.7%)	2 (1.1%)	1 (0.8%)	1 (0.8%)
Used force for sex	3 (1.7%)	2 (1.1%)	3 (2.5%)	1 (0.8%)
Used force for oral/anal sex	2 (1.1%)	2 (1.1%)	2 (1.6%)	2 (1.6%)

Note. Prevalence reported reflects the percentage of participants who experienced at least one incident of each type of IPV at each time point. IPV = Intimate partner violence.