Intimate Partner Violence in Couples Seeking Relationship Education
For the Transition to Parenthood

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Abstract

Intimate partner violence (IPV) is a prevalent and common problem yet is rarely screened for, or addressed, in couple relationship education (CRE). The current study examined the prevalence of IPV in 250 couples expecting their first child who were recruited into a study of CRE across the transition to parenthood. The couples were generally highly satisfied with their relationship, yet 32% reported at least one incident of IPV in the past 12 months, and 7% reported at least one spouse had been injured by IPV. The majority of violence was of low severity (pushing, slapping, or shoving), and the most common pattern was of reciprocal aggression between the partners. Given that even low severity IPV is associated with significant risk of injury and predicts risk of relationship separation, these high rates of IPV are concerning. CRE providers for expectant couples need to attend to prevention of IPV within their programs.

Intimate Partner Violence in Expectant Couples Seeking Relationship Education For the Transition to Parenthood

Intimate Partner Violence (IPV) is a common and significant problem in couples (Alhabib, Nur, & Jones, 2010). Couple Relationship Education (CRE) at the transition to parenthood shows considerable promise in enhancing couple relationships (Pinquart & Teubert, 2010), and possibly enhancing parenting (Halford & Petch, 2010). However, current evidence-based CRE programs for expectant couples seldom assess or directly address the occurrence of IPV. The current paper examined the prevalence of IPV among couples expecting their first child attending CRE, and also looked at correlates of IPV that might inform potential targets for intervention within CRE.

Significance of Perinatal Intimate Partner Violence

Intimate partner violence (IPV) perpetrated in the time period extending from 12 months preceding birth up until 12 months postpartum is referred to as perinatal IPV (Black & Breiding, 2008). Existing research on the prevalence of perinatal IPV has some significant limitations, so we draw upon some general findings about IPV to offer suggestions about what to attend to in assessing perinatal IPV. First, there are at least two distinctive types of IPV. The first type is characterized by frequent, high severity violence (e.g., punching kicking, hitting with an object, using a weapon); often leads to injury; and is associated with psychological domination and intimidation of the victim (Holtzworth-Munroe, Meehan, Herron, Rehman, & Stuart, 2000; Johnson & Ferraro, 2000). Severe IPV tends to be predominantly male-to-female directed, and male perpetrators show distinctive characteristics such as frequent substance abuse and other antisocial behaviours (Archer, 2000; Taillieu & Brownridge, 2010). This severe type of violence has been variously labelled using terms including patriarchal terrorism (Johnson & Ferraro, 2000), and anti-social type IPV

(Holtzworth-Munroe, et al., 2000). A recent systematic review of severe IPV noted an annual prevalence of 1% to 2% of couples (Alhabib, et al., 2010).

The second type of IPV is less severe aggression, variously referred to by terms including common couple violence (Johnson & Ferraro, 2000), and family only violence (Holtzworth-Munroe, et al., 2000). The type of IPV is characterized by infrequent, low level violence (e.g., pushing, slapping, or shoving); most often involves both male-to-female and female-to-male violence (Archer, 2000); and males do not show the same psychological characteristics seen in severely violent men (Holtzworth-Munroe, et al., 2000). Less severe violence is more prevalent than severe violence, with a 12-month prevalence of 25-30% for community samples (Archer, 2000; Halford, Farrugia, Lizzio, & Wilson, 2010).

A second finding from IPV research is that both severe and less severe IPV have significant negative consequences. Severe IPV is associated with high risk of injury, and even death; severe IPV is one of the most common forms of homicide (United Nations Centre for International Crime Prevention, 2002). While less severe IPV rarely results in death, there is still a significant risk of injury, and less severe IPV often leads to a sense of fear in the victim, particularly for women (Cascardi, Langhinrichsen, & Vivian, 1992). Less severe IPV predicts relationship separation across the early years of marriage (Rogge & Bradbury, 1999; Schumacher & Leonard, 2005). The third finding from IPV research is that, at least for the less severe violence, reciprocal female-to-male and male-to-female IPV are strongly associated (Stith, Smith, Penn, Ward, & Tritt, 2004).

There are numerous studies of the prevalence of perinatal IPV but many of these studies fail to distinguish between severe and less severe IPV, and almost all only assess male-to-female IPV and not female-to-male IPV. A recent review of 18 studies reported that 1-30% of pregnant women experience male-to-female IPV, with a median range of 4-8% (Taillieu & Brownridge, 2010). The large variations in male-to-female estimated perinatal

IPV prevalence are likely attributable, at least in part, to variations in samples. For example, higher prevalence occurs in samples of women who are socially disadvantaged (Taillieu & Brownridge, 2010). In addition, the reported prevalence of IPV is substantially lower in studies that assess IPV with one or two interview questions such as “Have you been hit?”, compared with studies that assess IPV using a comprehensive questionnaire asking about a wide range of acts of IPV (Sharps, Laughon, & Giangrande 2007).

Only two studies have assessed the prevalence of female-to-male perinatal IPV. Charles and Perreira (2007) reported in a study of 2,310 socially disadvantaged US mothers and fathers participating in the Fragile Families study, that 8.2% of women and 1.2% of men perpetrated some form of IPV during pregnancy. However, this study used only a single item to assess IPV and consequently likely underestimates the rate of IPV. Kan and Feinberg (2010) assessed IPV using the comprehensive Conflict Tactics Scales–Revised in a sample of 168 expectant couples predominantly recruited through antenatal classes, and reported 30% of women and 18% of men had perpetrated an act of IPV in the past year.

In addition to the previously described negative effects of IPV on the adult partners, perinatal IPV is associated with significant health risks for the child (Silverman, Decker, Reed, & Raj, 2006). Women experiencing severe perinatal IPV have a high prevalence of antepartum hemorrhage, miscarriage, pre-term births, neonatal and perinatal death, low birth weight infants, and absence of breastfeeding (Sarkar, 2008). Once couples become parents, perinatal IPV shows a moderate effect size association with low parenting efficacy, insensitive and unresponsive parenting, and later harsh and inconsistent discipline (Crockenberg, Leerkes, & Lekka, 2007). IPV also negatively impacts on child emotional and behavioural functioning (Cummings & Davies, 2002), and might be a precursor for child abuse and neglect (English et al., 2009). In families experiencing IPV, the co-occurrence of child abuse is estimated to be between 30% and 60% (Shay-Zapfen & Bullock, 2010).

CRE During the Transition to Parenthood

The transition to parenthood is an important source of both joy and challenges for most couples (Feeney, Hohaus, Noller, & Alexander, 2001). The strain of caring for a new infant is challenging for many couples, particularly for women who often assume the primary carer role (Petch & Halford, 2008). A reflection of this strain is evident in measures of relationship adjustment, with 50% of couples report substantial declines in relationship satisfaction across the transition to parenthood (Mitnick, Heyman & Slep, 2009). The perinatal period also is associated with increased couple conflict (Belsky & Kelly, 1994), and reduced effort devoted to the couple relationship (Halford, Petch, & Creedy, 2010). Given that low relationship satisfaction, frequent couple conflict, and low relationship effort are each associated with IPV (Halford, Farrugia, et al., 2010; Schumacher & Leonard, 2005) it is likely that perinatal IPV occurs in a substantial number of couples. Given the variability in couple adjustment to parenthood it is also important to assess correlates of IPV that might inform which couples are at risk.

Given that many couples struggle to adapt to parenthood, educational interventions with a focus on couple adjustment have been recommended to ease the transition (Cowan & Cowan, 2000; Petch & Halford, 2008). A series of randomized controlled trials show CRE enhances couple communication and relationship satisfaction across the transition to parenthood (Petch & Halford, 2008). The CRE programs that produce the strongest effects include a focus on developing realistic shared expectations of parenthood, enhancing couple communication, and developing couple mutual support (Pinquart & Teubert 2010).

With the notable exception of the ongoing Building Strong Families project (Wood, McConnell, Moore, Clarkwest & Hsueh, 2010), none of the existing randomised controlled trials of CRE programs for expectant couples assessed the occurrence of perinatal IPV, or specifically targeted preventing IPV. This is a significant oversight given the high prevalence

of male-to-female perinatal IPV, and the likely prevalence of female-to-male perinatal IPV. Concern about the prevalence and consequences of perinatal IPV has lead the American College of Obstetrics and Gynaecology and the American College of Nurse-Midwives (American College of Nurse Midwives, 2002) to recommend universal screening of male-to-female perinatal IPV. However, even with such strong recommendations, data from the Pregnancy Risk Assessment Monitoring System (PRAMS) suggested that only 22-39% of pregnant women are screened for IPV during prenatal visits (Anderson, Marshak, & Hebbeler, 2002). Furthermore, a comprehensive review of the literature identified that no screening of female-to-male violence occurs (Taillieu & Brownridge, 2010). Thus, lack of attention to IPV is a pervasive failing of services for expectant couples, and is a significant deficit in CRE programs for the transition to parenthood.

Predictors of IPV

Dutton proposed the nested Ecological Model of male-to-female IPV (Dutton, 1985) which was later extended by Halford (2011) to predict a range of couple relationship outcomes including both male-to-female and female-to-male IPV. Influences on IPV can be clustered into four factors: socio-cultural (such as low support from family and friends); major life events (such as unemployment, birth of a child); individual characteristics (like modelling of aggression in the family of origin, and substance abuse); and characteristics of the couple interaction (such as unrealistic relationship expectations, ineffective communication) (Halford, 2011).

Halford (2011) suggests it is useful to distinguish between static risk factors that are unchangeable by CRE and dynamic risk factors that are potentially modifiable by CRE. This distinction is not absolute. For example, an elevated risk of perinatal IPV is associated with unplanned pregnancy (Charles & Perreira, 2007). While unplanned pregnancy cannot be

changed in an expectant couple currently seeking CRE, CRE can encourage couples to plan future pregnancies. The key point is that CRE content is best focused on dynamic risk factors.

An example of a dynamic risk factors for IPV is relationship dissatisfaction, which is reliably associated with IPV (Stith, et al., 2004), and prospectively predicts the start of IPV (Panuzio & DiLillo, 2010). A second example is relationship self-regulation (RSR), which is the extent to which individuals constructively work at enhancing their couple relationship. RSR can be modified with CRE (Halford, Moore, Wilson, Farrugia, & Dyer, 2004). Low RSR correlates with IPV among newlywed couples, which might reflect high levels of frustration about the relationship due to a lack of knowledge about effective relationship change, resulting in the use of aggression (Halford, Farrugia, et al., 2010). Third, for women, a high level of social support is associated with a decreased risk of male-to-female IPV (Sonis & Langer, 2008). CRE can encourage seeking out social support, though it should be cautioned that one study found high male social support predicted male-to-female IPV (O'Leary, Slep, & O'Leary, 2007) possibly because men are drawn to friends whose attitudes toward aggression matches their own (Levendosky, Huth-Bocks, Semel, & Shapiro, 2002). Thus, CRE needs to encourage couples to seek out relationship enhancing social support.

Addressing Perinatal IPV in Couple Relationship Education

The skills taught in CRE are closely related to the known dynamic risk factors for IPV. For example, promoting positive communication and effective conflict management is common to most evidence based CRE programs (Halford, 2011). Teaching more effective communication might help couples resolve conflict without the use of physical aggression. Furthermore, given that RSR is associated with relationship aggression, teaching partners RSR skills might reduce IPV (Halford, Farrugia, et al., 2010). CRE therefore holds the promise of assisting couples to manage the challenges of the transition to parenthood effectively and not resort to IPV.

The couples that attend CRE are self-selecting and it is unclear what prevalence of IPV might be evident in these couples. The association between a relationship risk factor like IPV and attendance of CRE might take the form of augmentation, compensation or null association (Sullivan & Bradbury, 1997). Augmentation of IPV in this instance is when couples with IPV are under-represented in attendees, while compensation is when couples with IPV are over-represented in attendees. It currently is unclear if couples with perinatal IPV attend CRE. Establishing the prevalence of perinatal IPV in couples presenting for CRE could inform whether CRE can help address the problem of IPV.

Aims

One aim of the current study was to measure the prevalence of IPV among pregnant couples attending CRE at the transition to parenthood. To address the lack of data on female-perpetrated IPV we assessed both male-perpetrated and female-perpetrated IPV. The second aim was to identify correlates of perinatal IPV. Potential IPV correlates were chosen from previous research, and included marital status (cohabiting versus married), planned pregnancy (no or yes), couple relationship satisfaction, relationship self-regulation, and social support. Documenting the prevalence and predictors of IPV among pregnant couples can hopefully translate into targeted CRE programs, and identifying dynamic risk factors associated with IPV can suggest appropriate targets for change resulting from CRE that could reduce IPV.

Method

Participants

Five hundred and sixty couples were approached between July 2005 and September 2006 to participate in a study evaluating different models of education for expectant parents. Participants were approached while attending antenatal clinics at one of five publically-funded metropolitan hospitals. Inclusion criteria were: (a) the woman was between 20-35

weeks pregnant with her first child and not expecting a multiple birth; (b) the couple were in a relationship for at least 6 months; (c) both partners reported a Dyadic Adjustment Scale score of 90 or more (as highly distressed couples would likely require more intensive support); (d) neither partner had children from a previous relationship; (e) the couple lived within 50km of the recruitment hospital; and (f) both partners could read and write English.

Three hundred and ten (310) couples were not included; 112 did not meet inclusion criteria and 198 declined participation. Stated reasons for declining to participate were that both partners ($n = 79$) or the male partner was not interested ($n = 31$), too busy ($n = 45$), declined to give a reason ($n = 30$), or other ($n = 13$). Aside from recording the stated reason for declining participation our ethics board did not allow collection of further information.

Mean age for the 250 participating women was 28.7 years ($SD = 4.9$) and for men was 30.6 years ($SD = 5.8$), which is comparable to the mean age of first-time parents in Queensland, Australia (AIHW, 2005). Mean relationship duration was 5 years 5 months ($SD = 3$ years 3 months). Sixty-five percent (65%) of couples were married and the remainder were cohabiting, which is comparable to the 67% of Australian married couples having their first child (AIHW, 2005). Half of all women worked full-time (51%), while 85% of men worked full-time. Median annual salary for women was AUS\$34,761 ($SD =$ AUS\$21,881) and for men was AUS\$51,216 ($SD =$ AUS\$20,267) which is comparable to the median annual salary of AUS\$87,776 for Australian couples aged 15-44 years, without children (Australian Bureau of Statistics, 2006). Highly educated couples were over-represented in the study compared to the Australian population (ABS, 2006), with 43% of women and 33% of men having a university qualification, however there was a good representation of couples with low educational attainment (16% of women and 21% of men had not completed 12 years of school education). The majority of women (91%) and men (86%) were from an English-speaking country of birth; 1% of both genders were of Aboriginal or Torres Strait

Islander origin. Non-English Speaking Background (NESB) participants (9% of women, 15% of men) were under-represented compared to the Australian population of 33% (ABS, 2006). One third of pregnancies were unplanned (34%), a somewhat lower proportion than the Australian mean (51%) (Michelson, 2007).

Measures

Participants completed an assessment two months before the birth (pre-intervention), four months postpartum once they completed the couple intervention or a parenting program that served as the control condition (post-intervention), 16 months postpartum (follow-up 1) and 28 months postpartum (follow-up 2). However, only the pre-assessment data are used in this paper. The pre-assessment recorded couple demographics, pregnancy planning, relationship satisfaction, couple aggression, relationship self-regulation and social support.

Couple relationship satisfaction was assessed using the 32-item Dyadic Adjustment Scale (DAS) (Spanier, 1976), which has high reliability (Carey, Spector, Lantiga, & Krauss, 1993). Scores range from 0-150; higher scores reflecting higher relationship satisfaction; scores below 98 indicative of relationship distress ($M = 114.8$, $SD = 17.8$) (Spanier, 1976). Couple conflict was assessed via the 78-item Conflict Tactics Scale Revised (CTS-2) (Straus, Hamby, BoneyMcCoy, & Sugarman, 1996), the most widely used measure of abuse in intimate relationships, with adequate reliability, test-retest reliability and validity (Vega & O'Leary, 2007). Two subscales of the CTS were used in the current analyses: injury and physical assault, with the physical assault subscale distinguishing between minor and major acts of aggression. Couples provided both a self-report and partner-report of each of these five measures of conflict. We categorised couples as 'physical assault present' if either partner endorsed an act of physical aggression in the last 12 months; and 'injury present' if either partner endorsed an injury from relationship aggression in the last 12 months.

The 16-item Self-Regulation for Effective Relationships Scale (SRERS) (Wilson, Charker, Lizzio, Halford, & Kimlin, 2005) assessed the extent to which each partner utilised effective strategies and efforts to sustain their relationship. The two subscales of the SRERS show high internal consistency and stability over time (Wilson, et al., 2005). The SRERS total possible score for the strategies subscale is 50 (female mean = 37.3, $SD = 6.05$; male mean = 35.8, $SD = 6.25$), and for the effort subscale is 30 (female population mean = 23.45, $SD = 4.05$; male population mean = 22.65, $SD = 4.1$) (Wilson, et al., 2005). Finally, the 6-item Social Support Questionnaire-Satisfaction subscale (SSQ-S) (Saranson, Saranson, Shearin, & Pierce, 1987) was used to measure satisfaction with external support (excluding partner support). SSQ-S has good internal consistency and is negatively correlated with number of negative life events and positively correlated with self-esteem (Saranson, et al., 1987).

Procedure

Couples were invited to participate in a trial designed to compare CRE with mother-support for the transition to parenthood. About one week after recruitment a 60 minute home visit was conducted to gain informed consent, complete an intake interview and distribute a questionnaire to each partner along with a pre-paid return addressed envelope. Once both partners' questionnaires were returned the small number of couples reporting severe violence were contacted and offered referral to appropriate services. The remaining couples were randomised to either Couple Care for Parents (CCP) or Becoming a Parent (BAP). Detailed description of the intervention programs is available in Halford, Petch et al. (2010).

Results

We first examined the agreement between partners on the occurrence of intimate partner violence (IPV), and resulting injury. Given potential gender differences in the consequences of perpetration of IPV, Table 1 presents agreement between spouses separately

for female- and male-perpetrated IPV. Agreement was moderate for occurrence of IPV, and low for occurrence of injury.

A significant challenge in research is how best to measure IPV, with most authors opting to report occurrence, but others reporting various combinations of frequency and intensity of IPV (Kan & Feinberg, 2010). Given the moderate rates of agreement on occurrence, that agreement on rates of occurrence was likely to be lower than for presence/absence of IPV, and that the modal rate of occurrence was zero, we followed the convention of most researchers in focusing on prevalence of occurrence of IPV.

It is noteworthy that self-reported rates of IPV perpetration were slightly higher than spouse reports of victimization, and thus the inconsistent reporting between spouses was not attributable to perpetrators under-reporting occurrence relative to victims. However, based on the assumption made in much of the IPV literature that IPV is under-reported (Vega & O'Leary, 2007), IPV and injury were classified as occurring if either partner reported its occurrence. For example, female-perpetrated IPV was classified as occurring if either the woman or the man reported the female spouse had been violent. Similarly, male-perpetrated IPV leading to injury was classified as occurring if either the woman or the man reported the male spouse had been violent.

Figure 1 presents the prevalence of minor and severe IPV, and injury associated with IPV. The vast majority of IPV was minor, the most common being reports of pushing, slapping or shoving. In addition, there was a small but non-trivial minority of couples in which severe violence had occurred, such as punching, choking, or hitting with an object. There was a small but nontrivial minority of couples who reported injury of partner. Overall 81 couples (32%) reported at least one incident of IPV, and 18 couples (7%) reported at least one spouse had been injured by IPV. Given the reported incidents of IPV and injury occurred when the woman was pregnant, these figures are particularly concerning.

Women were reported to perpetrate violence at somewhat higher rates than men, with rates of injury reported at similar rates for IPV perpetrated by women and men. Occurrence of IPV by women was associated with occurrence of IPV by the male partner, $\chi^2(2) = 69.45$ $p < .05$. In 47 couples (19%) both partners perpetrated IPV, in 29 couples (12%) only the woman had perpetrated IPV, and in 5 couples (3%) only the man had perpetrated IPV. Similarly, perpetration of IPV leading to injury by the woman and the man were associated, $\chi^2(2) = 56.83$ $p < .05$. In six couples both partners had perpetrated IPV leading to injury of their spouse, in five couples only the woman had perpetrated IPV leading to injury and in seven couples only the man had perpetrated IPV leading to injury.

Correlates of Intimate Partner Violence

A logistic regression was conducted to test whether marital status (cohabiting versus married) or planned pregnancy (no or yes), predicted occurrence of any act of IPV in the couple. Neither of these variables significantly predicted the occurrence of IPV.

Next we conducted a hierarchical logistic regression predicting the occurrence of any act of IPV from the following variables, entered as three separate blocks: (1) female and male relationship satisfaction; (2) female and male self-regulation and effort, and (3) female and male satisfaction with social support. Entering block 1 predicted IPV, $\chi^2(df = 2, N = 250) = 13.78$ $p < .01$, but entering the next block of relationship self-regulation did not predict IPV, $\chi^2(df = 4 N = 250) = 1.20$ p ns, and neither did adding the final block of social support predicts IPV, $\chi^2(df = 2 N = 250) = 0.63$ p ns. Of the predictor variables, only lower female relationship satisfaction was associated with risk of IPV ($\beta = -.07$, $p < .05$).

Given that female and male relationship satisfaction is correlated, it was possible that the shared variance between low female and low male satisfaction was predicting IPV. To test this possibility we entered male relationship satisfaction alone, but it did not account for the occurrence of IPV. Relationship self-regulation and satisfaction are correlated (Halford,

Farrugia, et al., 2010), so it seemed possible that the lack of association between self-regulation and IPV might be due to entering satisfaction in the first block. However, there were no significant correlations of either male or female self-regulation with male-perpetrated or female-perpetrated IPV.

As it seemed plausible that there might be gender differences in the correlates of IPV, we conducted all the above logistic regressions for female-perpetrated and male-perpetrated IPV separately. The pattern of findings was identical: only low female relationship satisfaction was associated with IPV, and it was associated with both female-perpetrated and male-perpetrated IPV.

Discussion

The current study found a moderate agreement between spouses on the occurrence of IPV. Using any report by either spouse to define the occurrence of IPV, IPV had occurred in the past year in about one third (32%) of couples attending CRE, with just over 30% of women and 20% of men perpetrating at least one act of IPV. Most reported IPV was less severe, and the most common pattern was low-level reciprocal IPV. At least one incident of severe violence was reported by 7% of couples, and 7% reported a partner had been injured by IPV. Contrary to the hypotheses, cohabitation, unplanned pregnancy, male partner low relationship satisfaction, low relationship self-regulation, and low social support were unrelated to the occurrence of IPV. Only women's low relationship satisfaction showed a significant association with occurrence of IPV.

The current study is one of the first to assess IPV in expectant couples attending CRE, and is noteworthy for the use of a comprehensive measure of IPV and injury, and for assessing both female- and male-perpetrated IPV. The study replicates prior research by finding only a moderate agreement between partners on the occurrence of IPV, and low agreement on the occurrence of injury (Archer, 2000; O'Leary & Williams, 2006). Both

perpetrators (Archer, 2000) and victims (O'Leary & Williams, 2006) under-report the occurrence of IPV. In part this probably reflects the under-reporting of a socially undesirable behaviour. However, there is a consistent finding that spouses show only low to moderate agreement about the occurrence most behaviours in their relationship, not just socially undesirable behaviours (Johnson & O'Leary, 1996). As IPV typically occurs when only the spouses are present, researchers must rely on partners' reports to assess the occurrence of IPV, and detection of IPV is more likely when both spouses' reports are gathered. The current study extends prior work in three important ways: it shows (1) that female-to-male as well as male-to-female IPV is common, and IPV perpetrated by either spouse can be associated with injury; (2) much IPV in the perinatal period is reciprocal between partners; and (3) perinatal IPV is common in couples attending CRE.

Prevalence of Perinatal Intimate Partner Violence

There was a substantially higher prevalence of male-to-female IPV reported in the current study (22% of couples) than the median estimate of 4-8% of couples in previous studies (Taillieu & Brownridge, 2010), but is much closer to the 17% of men reported to perpetrate perinatal IPV by Kan and Feinberg (2010). Moreover, we found 31% of couples reported female-to-male perpetrated violence, which is very similar to the 30% of couples reported by Kan and Feinberg (2010). The high prevalence of IPV in the current and Kan and Feinberg studies is likely at least partially attributable to the using the CTS-2, which assesses occurrence of a wide range of specific aggressive acts. Many previous studies used interviews asking just a few questions that probably under-detected IPV. In addition, previous studies only assessed the female partner's report, whereas the current and Kan and Feinberg studies assessed both females and male partners' reports of IPV, which likely led to more frequent detection of IPV than in other studies.

The current and Kan and Feinberg (2010) studies both recruited couples who attended some form of antenatal education. The high prevalence of low severity, reciprocal IPV in the samples of couples in both studies might reflect a compensation effect, with IPV couples self-selecting into antenatal education. To test this possibility more research is needed to establish the prevalence of perinatal IPV in community samples relative to samples participating in CRE. Regardless of whether or not there is a compensation effect in CRE attendees, it is clear that couples who attend CRE show a substantial prevalence of IPV.

Correlates of Intimate Partner Violence

Cohabitation was unrelated to occurrence of perinatal IPV in the current Australian study, which contrasts with many US studies finding that cohabitation is associated with risk of IPV (Brownridge & Halli, 2000; Stets, 1991). This discrepancy might be attributable to a cross-national difference as the correlates of couple cohabitation are moderated somewhat by country (Jose, O'Leary, & Moyer, 2010). For example, relative to married couples, cohabiting couples in the US show substantially lower relationship satisfaction whereas the differences between cohabiting and married couples are much less marked in European and Australian couples (Jose, et al., 2010).

The current study found that lower female satisfaction with the couple relationship was associated with IPV. Low relationship satisfaction can be improved with CRE (Halford, 2011). Future research should seek to identify which particular aspects of couple interaction are associated with perinatal IPV (e.g., negative couple communication during conflict), which might be addressed in CRE. Contrary to our hypothesis, relationship self-regulation was not associated with perinatal IPV, which contrasts with recent work finding a strong association between low relationship self-regulation and IPV in newlywed couples (Halford, Farrugia, et al., 2010). The reason for this lack of replication is unclear.

Limitations

There are a number of limitations of the study that should be acknowledged. First, while the sample was broadly representative of the Australian childbearing population, couples with low education and minority ethnicity were under-represented. Second, the prevalence of severe IPV was low in the current sample. Given the very substantial differences noted in the introduction between less and more severe IPV, the current study provides little information on the reliability of assessment, prevalence or correlates of severe IPV. Third, like most of the literature on perinatal IPV the current study assessed IPV in the antenatal period. The perinatal period is defined to include the first 12 months post-partum, and there needs to be research on IPV in the postpartum period, particularly on female-perpetrated IPV as it has not been researched at all. A noteworthy distinction of the current study from much prior research was its focus on couples attending CRE. The current sample provides very useful information on IPV in couples attending CRE, provides some of the first data on occurrence of female-perpetrated IPV, and underscores to providers of CRE the need to attend to IPV. However, it cannot be presumed that the findings are generalizable to the whole population of couples having their first child.

Implications for Couple Relationship Education

The occurrence of IPV is common in couples expecting their first child attending CRE. Those offering CRE should routinely screen for IPV, assessing both female- and male-perpetrated IPV. In instances where severe IPV is detected, the appropriateness of CRE needs to be reviewed and referral to appropriate services should be provided. CRE should include interventions designed to reduce the risk of future IPV, such as teaching effective communication and conflict management, and explicitly inform couples about the risk of even low severity IPV. The effectiveness of CRE programs in reducing IPV should be a focus of future research.

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Figure 1 Percent of couples reporting intimate partner violence perpetrated by female and male partners

Table 1. *Percent Prevalence and Inter-spouse Agreement on Occurrence of Intimate Partner Violence in Expectant Couples (n =250)*

Violent Act	Self-report	Spouse-Report	Kappa
Female-perpetrated violence	23	20	0.48*
Male-perpetrated violence	16	14	0.53*
Female-perpetrated injury of man	3	2	0.15
Male perpetrated injury of woman	4	2	0.36*