

# Abuse Disclosure in Privately and Medicaid-Funded Pregnant Women

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Disclosure of abuse by pregnant women can vary depending on whether the woman is assessed directly by a trained interviewer versus written questionnaires, and if she is asked repeatedly during the course of pregnancy. One thousand pregnant women were enrolled in a randomized clinical trial designed to assess the effects of a nursing case management intervention on the mental and physical well-being of pregnant women experiencing or at risk for abuse. Thirteen percent of the total study participants reported current abuse and/or abuse within the past year, with only 2% of those reporting that the abuse occurred during pregnancy. The incidence of reported abuse was much higher among Medicaid-funded women (28.9%) than privately insured women (8.7%). Regardless of source of payment, women reporting abuse were significantly younger, less educated, nonwhite with lower income, and had significantly higher stress and lower self-esteem than women not reporting abuse. A high incidence of women reporting intimate partner violence described being choked on the Danger Assessment Screen (34%). We strongly urge that choking be added to routine screening questions used during pregnancy and that the Danger Assessment tool is used for further evaluation of women who screen positive. In addition, we believe another barrier to reporting abuse was fear of being reported to child protective services, contributing to the overall low rate of abuse disclosure. *J Midwifery Womens Health* 2006;51:361–369 © 2006 by the American College of Nurse-Midwives.

**keywords:** abuse, screening questions, pregnancy

## INTRODUCTION

Approximately 5.3 million intimate partner victimizations occur every year among women over 18 years of age within the United States. It has been estimated that approximately 324,000 of these victimizations occur during pregnancy.<sup>1</sup> Research estimates the prevalence of intimate partner violence during pregnancy to range from 0.9% to 20.1%.<sup>2</sup> The wide range in rates is due to a number of factors including the methods used to screen for abuse and populations screened. Higher rates are usually reported when health providers conduct face-to-face interviews.<sup>3</sup> Generally, adolescents and women with lower incomes report higher rates of intimate partner violence.<sup>2,4–6</sup> According to the Centers for Disease Control and Prevention (CDC),<sup>1</sup> abuse during pregnancy may be more common than gestational diabetes, neural tube defects, and pre-eclampsia. Intimate partner violence during pregnancy has been associated with an increased incidence of abruptio placentae, spontaneous abortion, premature labor and birth, low birth weight, and intrauterine fetal death.<sup>7,8</sup> Other negative effects include increased behavioral, somatic, and stress-related conditions, such as use of tobacco, alcohol, and drugs; increased use of medications; increased suicide rate; chronic pain; and increased use of medical services.<sup>2,5–7</sup> Intimate partner violence is estimated to cost the United States approximately \$5.8 billion dollars annually for

medical and mental health care, lost productivity, and in lost earnings secondary to homicide.<sup>1</sup>

A large, multisite, randomized controlled trial named Connections was designed to test whether a nursing case management intervention for pregnant women who are at high risk for abuse would have a significant impact on reducing psychosocial stress, reducing severity of abuse, reducing prenatal hospital admissions, and improving infant birth weight. A full description of the nurse case management intervention and the results of the intervention are described elsewhere.<sup>9</sup> The purpose of this article is to describe the similarities and differences between women who did and did not disclose abuse as well as differences within the group of women who disclosed abuse, based on method of payment for prenatal care and the risk for homicide.

## METHODS

Two sites in the United States were used in this study. One was an urban health maintenance organization prenatal clinic (clinic A) in the Pacific Northwest, and the other was a university prenatal clinic (clinic B) in a rural area in the Midwest. Both clinics serve a culturally and economically diverse population. The urban clinic serves a patient population that is 30% Medicaid insured and 70% privately insured; the rural clinic population is 45% Medicaid insured and 55% privately insured. Each site had a three-member team consisting of a principal investigator, one research nurse responsible for recruiting participants and administering the research instruments, and a nurse responsible for providing the case management.

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To be eligible for the study, women had to speak English and be at least 16 weeks' gestation but less than 22 weeks' pregnant. Women were approached during a routine prenatal clinic visit. The informed consent and consenting procedures were approved by the appropriate institutional review boards at each of the clinical sites. Women who were eligible for the study were asked by the office nurse if they would be willing to talk to the Connections research nurse about a study. If the woman agreed to meet with the research nurse, the Connections nurse either met with the woman in private at that time or arranged another convenient time that the two of them could meet to fully discuss the consent form. The consent form ensured the women confidentiality by: using study numbers rather than names, all records were kept in a locked file cabinet, the information was not made part of the woman's medical record, and through a Certificate of Confidentiality obtained from the National Institute of Mental Health. Women were also informed that their medical records would be assessed by the researcher but that the information would only be identified by study number. In both states, medical personnel are mandatory reporters of child and elder abuse, so all women were informed of this at the time of consent.

If the woman agreed to participate, the initial research assessment (T1) was completed prior to 23 weeks' gestation. After this assessment was completed, the woman was then randomized to either the control or intervention group by the nurse opening an opaque envelope that contained the woman's study assignment. A second assessment (T2) was completed between 32 weeks and delivery.

The T1 instruments took approximately 30 minutes to complete and included sociodemographic characteristics, the Prenatal Psychosocial Profile,<sup>10</sup> and three questions from the Abuse Assessment Screen.<sup>11</sup> If the woman screened positive for intimate partner violence, the Danger Assessment<sup>12</sup> was administered to determine the woman's risk for becoming a victim of homicide. After these questionnaires were completed, participants completed a confidential self-report of tobacco, alcohol, and drug use and the Index of Spouse Abuse<sup>13</sup> while the research nurse stepped out of the room. At T2, all instruments except the sociodemographic questionnaire were repeated, which took approximately 10 minutes.

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Women were compensated \$10 after T1 and \$15 after T2.

Standard demographic information, such as age, partner status, race, education, and income level were collected at the T1 assessment. Additional questions regarding the woman's obstetric history, her prepregnancy weight, and whether the pregnancy was planned were also asked at that time.

The Prenatal Psychosocial Profile is a 44-item Likert Scale, which measures stress, support from partner, support from others, and self-esteem. It has established validity and reliability<sup>10,14</sup> and has been used extensively with pregnant women. One of the 11 stress questions asks the extent to which current physical, sexual, or emotional abuse is stressful, on a scale of none (1) to a lot (4). A response of some, moderate, or severe stress on this question has been associated with an increased incidence of low birth weight.<sup>15,16</sup>

The Abuse Assessment Screen<sup>11</sup> asks the following questions: 1) Within the last year, have you been hit, slapped, kicked, or otherwise physically hurt by someone? 2) Since you have been pregnant, have you been hit, slapped, kicked, or otherwise physically hurt by someone? and 3) Within the last year, has anyone forced you to have sexual activities? Criterion validity has been established with the Conflict Tactics Scale,<sup>17</sup> the Index of Spouse Abuse,<sup>13</sup> and the Danger Assessment Scale.<sup>12</sup> Although the Abuse Assessment Screen was designed to be used primarily as a screening tool for clinical purposes, a positive response to these questions has been used as a dichotomous measure of abuse in several studies.<sup>4,18,19</sup>

The Habits Survey is a confidential self-report of tobacco, alcohol, and drug use, which asks women to report the amount of these substances she uses on a daily and/or weekly basis. This questionnaire has been used in an earlier study,<sup>20</sup> which resulted in less than 1% missing data and disclosure rates of substance use that were higher than when other methods were used.

The Index of Spouse Abuse is a 30-item self-report tool designed to measure the severity and magnitude of physical and psychological abuse.<sup>13</sup> Participants respond on a 5-point Likert Scale regarding the frequency of the items (1 = never to 5 = frequently). The items (e.g., My partner screams and yells at me; My partner frightens me) have weighted scores, with higher scores indicating greater severity of abuse.

During the first year of recruitment, we were struck with how often women volunteered that although they were not currently experiencing intimate partner abuse, they had experienced violence in the past. Thus, at T1, we decided to add three additional abuse questions that women confidentially answered at the same time they completed the Habits Survey and Index of Spouse Abuse: 1) Have you ever been emotionally or verbally abused by a partner or ex-partner? 2) Have you ever been

physically abused or hurt in any way (pushed, shoved, hit, slapped, kicked) by a partner or ex-partner? 3) Has anyone ever attacked you with or without a weapon?

All women who were positive for intimate partner abuse on the Abuse Assessment Screen were administered the Danger Assessment. The Danger Assessment was designed to determine women's risk of homicide from their intimate male partner.<sup>12</sup> Women answer yes or no to the 15 questions (e.g., Is he violent outside the home? Is there a gun in the house?). Internal consistency has ranged from .60 to .71, a result of the low item variability on some of the rare, but important risk factors, the dichotomous format, and small sample sizes.<sup>4</sup> The Danger Assessment has moderate to strong correlations with measures of severity of abuse and degree of female injury, which provides evidence of construct validity.<sup>21</sup> A cutoff score of 7 or more and/or clinical judgment as suggested by Dr. Jacqueline Campbell (personal communication, October 2001) was used to identify women at high risk for homicide.

All women were offered a small, trifold business card-size safety card that contained the empowerment protocol information developed by Parker and McFarlane.<sup>22</sup> Women in the control group who disclosed intimate partner violence and had a Danger Assessment Score of greater than 7 were provided immediate safety planning and offered contact with the clinic social worker. Women randomized to the intervention group who had Danger Assessment scores greater than 7 were put in immediate contact with the study's nurse case manager.

Data were entered, verified, and analyzed on a Dell Solo 5300 laptop using SPSS version 12.0. ANOVA and  $\chi^2$  were the statistical tests used for this article. Statistical significance was set at .05.

## RESULTS

A sample of 1000 women (500 women from each site) was enrolled over a 2-year period (2001–2003). A total of 1649 women were approached, 793 women at clinic A and 856 at clinic B, for an overall participation rate of 60%.

The three main reasons women gave for not participating were the same at both sites. The most frequent reason reported was not having time to hear about the study ( $n = 330$  [51%]). The second most common reason was being greater than 22 weeks by the time women were able to meet with the study nurse ( $n = 252$  [39%]). This included quite a few adolescents who had to obtain parental permission to participate and forgot to bring their signed parental permissions to clinic with them, or for the patients at clinic B, having to have their parent physically present to sign the consent form as the teen signed an assent form. A few women ( $n = 67$  [10%]) signed the consent form but did not complete the initial

research assessment at the time of signing the consent and were subsequently not enrolled. Most of these women were at an advanced gestational age when approached later to complete the initial assessment ( $n = 40$ ), a few had changed their mind about participating ( $n = 10$ ), and the remainder had moved, miscarried, or changed prenatal providers ( $n = 17$ ). The demographic characteristics of participants at both sites are shown in Table 1. Women at the rural site were significantly younger, less educated, reported lower incomes, and had more previous pregnancies and births ( $P < .05$ ). However, there were few significant differences in the prevalence of abuse experiences between women at the two sites; thus, the abuse-related data from the two sites were combined.

## Incidence of Abuse

There were a total of 135 (13.5%) women out of the total of 1000 women at T1 who reported abuse on one or more items on the Abuse Assessment Screen or the abuse-related stress item on the Prenatal Psychosocial Profile. Ninety (9%) of the women reported physical abuse in the last year, 22 (2%) reported current physical abuse during the pregnancy, and 17 (1.7%) reported sexual abuse in the past year. Six women (1.2%) reported stress on the Prenatal Psychosocial Profile abuse question but were negative on all the Abuse Assessment Screen questions. Women at the rural site were more likely to report current sexual abuse, but the numbers were too small for statistical analysis.

Although the majority of women ( $n = 100$ ) reported the perpetrator was an intimate partner, 35 women reported being abused by someone else. The most common nonpartner perpetrator was a sibling or family member ( $n = 14$ ), followed by work acquaintances ( $n = 8$ ), friends ( $n = 4$ ), and fights with other people ( $n = 2$ ). One woman reported being physically abused in her day

**Table 1.** Demographics of the 1000 Connections Participants

Demographics	Clinic A/Urban ( $n = 500$ )	Clinic B/Rural ( $n = 500$ )
Race, $n$ (%)		
Caucasian	338 (67.6)	410 (82)
African American	81 (16.2)	61 (12.2)
Hispanic	22 (4.4)	7 (1.4)
Asian/Pacific Islander	19 (3.8)	13 (2.6)
Native American	6 (1.2)	—
Other	34 (6.8)	9 (1.8)
Age, $y$ (M [SD])	29.72 (5.91)	27.73 (5.87)*
Monthly income, \$ (SD)	3871 (2888)	2892 (2918)†
Education, $y$ (SD)	15 (2.86)	14.56 (3.31)*
Private or self-pay, $n$ (%)	450 (90)	310 (62)
Medicaid, $n$ (%)	50 (10)	190 (38)

\* $P < .05$ .

† $P < .001$ .

care job, one reported emotional abuse from her husband's commanding officer, and one reported stress related to past sexual abuse. Four women refused to name the perpetrator. There were no significant demographic differences between women who identified an intimate partner as the perpetrator and those who identified other persons as the perpetrator of abuse, except women reporting nonintimate partner violence abuse reported fewer previous births ( $P = .04$ ).

All participants were reassessed for abuse at T2. Women were asked to complete the Abuse Assessment Screen for violence that had occurred *since* their initial assessment. Five women reported new physical abuse, and five other women reported stress related to abuse on the Prenatal Psychosocial Profile. A major reason for having participants confidentially complete the Index of Spouse Abuse at T1 and T2 was to see if offering women the opportunity to anonymously disclose abuse would increase disclosure rates. All of the participants at the urban site whose scores exceeded the cut scores for physical and/or nonphysical abuse on the Index of Spouse Abuse at T1 also screened positive on the Abuse Assessment Screen. At T2, both of the participants at the urban site who disclosed abuse occurring since T1 also exceeded the cut scores on the Index of Spouse Abuse at T2. However, at the rural site, eight women exceeded the Index of Spouse Abuse cut scores at T1, but they reported no abuse on the Abuse Assessment Screen at T1. Seven of these eight women exceeded the cut scores on both the physical and nonphysical scales. Compared with the women reporting abuse on the Abuse Assessment Screen at the rural site, these eight women were older, more educated, and all were white.

### Lifetime History of Abuse

We decided to add lifetime measures of abuse midway through the study in response to the large number of women who were volunteering past experiences of abuse. The new measures asked if women had ever: 1) experienced emotional abuse by anyone; 2) experienced physical abuse by anyone; and 3) been attacked with or without a weapon. A total of 369 participants confidentially answered these questions at T1 at the same time they completed the Habits and Index of Spouse Abuse instruments. One hundred twenty-six women (34%) reported past emotional abuse, 104 (28%) reported physical abuse, and 75 (20%) reported being attacked. Women who reported past physical abuse on the Abuse Assessment Screen were significantly more likely to report past abuse experiences on all three items ( $P < .001$ ). Women who reported pregnancy abuse were significantly more likely to report past emotional and physical abuse ( $P < .001$ ) but not being attacked. None of the 369 women who completed the lifetime violence questions reported sexual abuse in the past year. There were no significant

differences between women who reported intimate partner violence and women who reported nonintimate partner violence on lifetime experiences of abuse, although there was a trend for women who reported abuse from their partner to report more lifetime emotional and physical abuse.

As seen in Table 2, there were significant differences between the demographic characteristics of women who did and did not disclose abuse. Women reporting abuse were younger, less educated, had lower income, were more likely to be African American, less likely to be married, and more likely to be living alone. Women reporting abuse were also significantly more likely to have dropped out of high school. Consistent with the differences between sites, the women in the urban clinic who reported abuse had significantly higher incomes and were more likely to be nonwhite than the women reporting abuse at the rural site.

There was a significant difference in the prevalence of reported abuse by source of payment for prenatal care. Most participants were privately insured ( $n = 729$  [73%]), 240 women were insured by Medicaid (27%), and the remainder were self-pay ( $n = 31$  [3.1%]; 2 of these women were positive for abuse). Although nearly half ( $n = 64$  [47%]) of the women reporting abuse were privately insured, they only represented 8.7% of women in the privately insured group. On the other hand, of the 240 Medicaid insured women, 69 (28.7%) reported abuse. When the characteristics of women reporting abuse were compared by insurance status, the Medicaid patients were significantly younger (22.36 years versus 26.06 years;  $P < .001$ ), less educated (11.74 years versus 13.66 years;  $P < .001$ ), and had lower incomes (\$776 per month versus \$2539;  $P < .001$ ). There were no significant differences in previous obstetric history between or within these groups.

### Psychosocial Stress

There were significant differences between the Prenatal Psychosocial Profile scores of the women who did and did not report abuse at both T1 and T2 (Table 3). At both times, women reporting abuse had significantly higher stress and lower support and self-esteem scores compared with the scores of women who did not report abuse. Women in both groups had significantly lower ( $P < .001$ ) stress and significantly higher ( $P < .001$ ) self-esteem scores at T2, although there were no differences between the groups. There were no changes in either group's support scores between T1 and T2.

### Substance Use

As with the disclosure of abuse, very few women admitted to using tobacco, alcohol, or drugs despite the confidential data collection method used. Because of the very low reported incidence of alcohol or drug use (less

**Table 2.** Demographic Characteristics of Women Who Did and Did Not Disclose Abuse (N = 1000)

Variable	Disclosed Abuse (n = 135)	No Abuse Disclosed (n = 865)
Age (mean, range)	24.3 (14-41)	28.8 (15-45)*
Education, y (mean, range)	12.67 (9-19)	15.11 (6-27)*
Monthly income (mean, range)	\$ 1647 (0-7500)	\$ 3642 (0-42,000)*
	<u>n (%)</u>	<u>n (%)</u>
Married living with partner	35 (26)	621 (72)
Married living alone	6 (4)	6 (0.7)
Single living with partner	44 (33)	145 (17)
Single living alone	50 (37)	93 (11)*
Caucasian	73 (54)	675 (78)
African American	41 (30)	101 (12)*
Asian/Pacific Islander	2 (2)	30 (4)
Hispanic	5 (4)	24 (3)
Native American	3 (2)	3 (.03)
Medicaid	64 (8.7)	171 (71.3)
Private/self-pay	69 (8.7)	665 (91.3)

\**P* < .001.

than 1%), only tobacco use is described here. At T1 and T2, less than 13% of all participants reported any tobacco use. However, at both times, women reporting any abuse were significantly more likely to smoke (24%) than women who did not report abuse (11%).

### Risk for Homicide

Only participants who reported experiencing abuse from their intimate partner were assessed for their risk for homicide with the Danger Assessment.<sup>12</sup> The time reference for women to consider at T1 was the past 6 months, and the interval since T1 was the reference at T2. As seen in Table 4, 97 of the 100 women who reported abuse from an intimate partner were assessed at T1. Three women refused to answer the Danger Assessment at that time. Seventy-nine of the 100 women repeated the Danger Assessment at T2. Reasons for the missing data at T2 included women who delivered too early to complete the T2 assessment, women who left the study, and seven women were not reassessed because of an early study protocol decision if the partner was completely removed from the woman's life, then the Danger

Assessment did not need to be repeated at T2. The 10 women who disclosed intimate partner abuse at T2 for the first time also completed the Danger Assessment at T2.

The Danger Assessment scores for the two sites were combined, as there were only three significant differences between sites. At T1, more women at the rural site reported the abuse had increased in the past year, and at T2, more women at the rural site reported experiencing forced sex. In addition, the male partners of women at the rural site were more likely to be involved in drug use. Overall, at T1, 22 women scored greater than 7 (22%), which was the recommended cut score for increased risk of homicide. Stated another way, almost a quarter of the women who were experiencing abuse from an intimate partner were at high risk for homicide according to their Danger Assessment scores. At T2, 14 women (18%) scored greater than 7. Fewer items on the Danger Assessment were endorsed at T2 or didn't change, with one important difference. More women reported being beaten while pregnant at T2 than at T1.

There were differences in the mean scores between

**Table 3.** A Comparison of Prenatal Psychosocial Profile (PPP) Scores Between Women Who Did and Did Not Disclose Abuse at T1 and T2 (N = 1000)

PPP score	Time 1		Time 2	
	Reported Abuse (n = 135) Score (SD)	Did Not Report Abuse (n = 865) Score (SD)	Reported Abuse (n = 135) Score (SD)	Did Not Report Abuse (n = 865) Score (SD)
Total stress	22.19 (5.05)*	17.50 (3.81)	19.93 (4.65)*	16.91 (3.61)
Support partner	48.30 (14.69)*	56.80 (8.30)	49.90 (12.31)*	56.73 (9.72)
Support other	53.08 (11.89)*	55.81 (9.19)	52.69 (11.11)*	55.99 (8.90)
Self-esteem	33.37 (5.38)*	36.58 (4.76)	34.52 (5.30)*	37.16 (4.81)

Note: High-stress scores indicate higher stress; low social support scores indicate poorer social support; and low self-esteem scores indicate poor self-esteem.

\*All differences between groups were significant at *P* < .001.

**Table 4.** Danger Assessment Item Endorsement at T1 and T2

Item	Time 1 (n = 97) n (%)	Time 2 (n = 79) n (%)
Physical violence increased in frequency in the last year.	20 (20.6)	19 (24.1)
Weapon or threat of weapon has been used.	16 (16.5)	12 (15.2)
Has he tried to choke you?	33 (34)	19 (23.8)
There is a gun in the house.	24 (25.3)	11 (13.8)
Have you been forced to have sex?	25 (25.8)	12 (15)
He uses drugs.	31 (33)	22 (28.2)
He has threatened to kill you or think he could.	33 (34.4)	21 (26.6)
He is drunk every or almost every day.	23 (23.7)	14 (17.9)
He controls most of your daily activities.	45 (46.4)	32 (40)
He has beaten you while pregnant.	20 (20.6)	19 (24.1)
He is violently jealous.	48 (49.5)	26 (32.5)
Have you ever threatened or tried to commit suicide?	30 (30.9)	20 (25)
He has threatened or tried to commit suicide.	34 (35.4)	23 (29.5)
He is violent toward children.	6 (8.3)	3 (4.9)
He is violent outside the home.	30 (32.3)	22 (28.9)
Total	97 (100)	79 (100)

Note: The numbers in the columns (Time 1 and Time 2) are the number of positive responses followed by the percentage in parentheses to each of the questions on the Danger Assessment. Women were asked to think about the previous 6 months when they answered the questions at Time 1 and since the last interview at Time 2.

women who remained in contact with their abuser at T2 (n = 44) and those who were no longer in contact with their abuser at T2 (n = 26). As seen in Table 5, the mean scores for women who remained in contact with their abuser were lower at both points, and fewer had scores greater than 7 at either time.

## DISCUSSION

This is one of the largest trials that assessed for abuse in a predominately middle-income group of women, and the results raise more questions than answers. We were surprised at the overall low incidence of abuse disclosure (13.5%), especially because a much higher incidence had been reported at the same urban site in a previous study<sup>10</sup> using the same three Abuse Assessment Screen questions. Although the 2% incidence of abuse during pregnancy reported in this study was within the range reported in the literature,<sup>23</sup> the previous study at the same urban site had an 11% disclosure rate during pregnancy with use of the same questions and procedures.<sup>10</sup> Unfortunately, we don't believe the violence has actually decreased; instead, the barriers to disclosing abuse have increased. It is likely our participants experienced the same barriers that have been consistently reported, in-

cluding shame, embarrassment, fear of retaliation by the perpetrator, and the belief nothing can be done anyway.<sup>24</sup>

However, we suspect that a significant barrier, particularly for the women covered by Medicaid, was fear of being reported to Children's Protective Services. Despite having research nurses who were intentionally not members of the clinic staff and who could ensure confidentiality, there was enormous confusion during the study period in both clinical communities regarding what was and was not a reportable event. Rumors were rampant regarding what might happen if abuse was disclosed to anyone in authority, including losing custody of existing children. As the consent forms that women signed for the study included a statement that child and elder abuse would be reported, we suspect many women experiencing abuse chose not to disclose out of fear of losing their children. This dilemma obviously has profound implications for clinical practice as well as conducting research in this area. For practitioners, the practice of screening and educating all women regardless of their response to the abuse questions would ensure that no barrier would stop women from getting critical information they may need to stay safe. From a research perspective, the barriers to women not disclosing is a threat to the internal

**Table 5.** Differences in Danger Assessment Scores Between Women Who Were and Were Not in Contact With Their Partners at Time 2

	Time 1 (n = 44)		Time 2 (n = 26)	
	Total Mean Score	Score >7 n (%)	Total Mean Score	Score >7 n (%)
Women in contact with partner	3.82	9 (20%)	2.99	5 (12%)
Women not in contact with partner	5.88	9 (35%)	4.69	9 (35%)

validity of the study. Further research is needed to find ways to decrease the number of false-negative cases.

Another way of interpreting the low disclosure rates is based on the high proportion of privately insured participants in the study, who reported much less abuse (8.7%) than Medicaid-insured participants (28.9%). Although this is consistent with other studies,<sup>2,25–28</sup> we had expected more disclosure among the privately insured women on the anonymously completed Index of Spouse Abuse. It is surprising that only eight women, all from the rural site, had positive Index of Spouse Abuse scores but negative Abuse Assessment Scores. However, these women were significantly older, more educated, and more likely to be privately insured. The unresolved question remains whether this is an underreporting among more economically advantaged women or whether they actually experienced less physical abuse from their intimate partners.

Participants spontaneously told the research nurses about past experiences of violence, both intimate partner and other, which must have felt safer than revealing current abuse. However, as in many other studies,<sup>25,29,30</sup> we found past experiences of violence were significantly related to recent/current abuse. A trend worth considering was the higher association between recent/current intimate partner violence and history of physical and emotional abuse, and the association between recent/current nonpartner violence and being attacked in the community.

As no studies have yet examined the differential effects of recent intimate partner violence versus nonpartner violence on pregnancy outcomes, we believe both types of violence need to be evaluated. This means screening for abuse by “anyone,” and then asking about perpetrators. At this point, there are no data to support that experiencing workplace violence or being hit by a family member is more or less damaging to the woman and her pregnancy than being abused by her partner. As will be recalled, the only difference between the 100 participants reporting partner abuse and the 35 women experiencing nonpartner violence was that the latter group had fewer previous births. They were not less likely to be partnered. It is possible that women reporting nonpartner violence might feel safer or less stigmatized reporting these experiences.

The characteristics of participants who disclosed abuse in this study are consistent with other reports.<sup>20</sup> As a whole, they were significantly more likely to be young, less educated, have lower income, use tobacco, and have more psychosocial stress than participants who did not disclose abuse. However, within the group of participants reporting abuse, women with private insurance were older, more educated, and had higher income than women covered by Medicaid. This means that even women with an average monthly income of \$2539 are not immune to abuse.

The participants’ scores on the Danger Assessment merit serious attention. An alarming percentage of women who reported abuse had scores that indicated an increased risk for homicide: 22% at T1 and 18% at T2. (As a reminder, immediate assistance was offered to all study women with high Danger Assessment scores.) Women who were no longer in contact with their abuser at T2 had the highest scores at both times, which is consistent with the knowledge that danger increases before and after a relationship change. The high percentage of women who reported they had been choked (34% at T1 and 24% at T2) is of particular concern. Women have told the authors that choking is “a favorite during pregnancy,” as it doesn’t leave cuts and avoids striking the fetus. This appeared to be true for some women in our study, as fewer women reported being beaten (21%) than choked (34%) on the Danger Assessment at T1. However, proportionately more women reported being beaten during pregnancy at T2 than at T1, and the proportion of women reporting choking declined at T2, indicating that both forms of violence need to be assessed.

## CLINICAL IMPLICATIONS

A major implication is to be clear about the reason for asking about violence. If the reason is to determine eligibility for an intervention, such as in our study, then the net has to be cast deep and wide by using multiple measures of violence and other “markers” for violence such as psychosocial stress. Our biggest regret is that we did not do that. On the other hand, if the purpose is to offer universal clinical screening with the purpose of providing information about the significance of abuse and the availability of resources, then a brief screening tool such as the Abuse Assessment Screen is adequate. We strongly urge that choking be added to routine screening questions used during pregnancy and that the Danger Assessment tool is used for further evaluation of women who screen positive.

As if providers didn’t already have substantial barriers to screening for violence,<sup>31–34</sup> the legal and ethical dilemmas posed by mandatory reporting makes it all the more difficult. Providers should know their local mandatory abuse-reporting laws and the consequences to women for being reported, although the interpretations of these laws can be painfully ambiguous and vary within a jurisdiction. However, we believe it is incumbent on the provider to make it abundantly clear to women what their chances of being reported are, what the consequences might be, particularly loss of child custody, as well as the potential benefits, such as welfare assistance.

Thus, we recommend considering alternatives to face-to-face interviews, such as confidential computer-assisted interviews that include referral and advocacy information.<sup>35,36</sup> This would allow women experiencing violence to protect their public image as a “normal and

nonabused woman,"<sup>37</sup> receive critical information about resources, and circumvent the fear of being reported to Child Protective Services. These interviews can easily be programmed to give women the option of giving her provider the answers to the screening questions. We also recommend leaving printed materials that include information about local violence resources in public (waiting rooms) and private (restrooms) places.

In summary, we urge a reexamination of the existing screening protocols in the context of changing welfare policies, abuse-reporting laws, and women's perceptions of the risk and benefits of disclosing abuse to health care providers. Let us be clear: our recommendation is not to eliminate routine screening for violence during pregnancy. What is needed are screening methods that will increase women's willingness to disclose so they may be offered further assessment, education, and support.

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