Published in final edited form as:

J Obstet Gynecol Neonatal Nurs. 2008 ; 37(4): 492–501. doi:10.1111/j.1552-6909.2008.00266.x.

Comparative analyses of stressors experienced by rural low-income pregnant women experiencing intimate partner violence and those who are not

Shreya Bhandari, MSW,

Doctoral Candidate, Department of Social Work, University of Missouri-Columbia, Columbia, Missouri

Alison Levitch, MA,

Doctoral students in the Department of Human Development and Family Studies, University of Missouri-Columbia, Columbia, Missouri

Kathleen Ellis, MSN, RN,

Doctoral student in Nursing at the Sinclair School of Nursing, University of Missouri-Columbia, University of Missouri-Columbia

Katharine Ball, MA,

Doctoral students in the Department of Human Development and Family Studies, University of Missouri-Columbia, Columbia, Missouri

Dr. Kevin Everett, PhD,

Associate Professor in the Department of Family and Community Medicine, University of Missouri-Columbia, Columbia, Missouri

Elizabeth Geden, PhD, RN, and

Professor Emeriti at the Sinclair School of Nursing, University of Missouri-Columbia, University of Missouri-Columbia and Family Nurse Practitioner at the Family Health Center, Columbia, Missouri

Dr. Linda Bullock, PhD, RN

Professor at the Sinclair School of Nursing, University of Missouri-Columbia, University of Missouri-Columbia, Columbia, Missouri

Abstract

Objective—To describe the daily lives of rural pregnant women who smoked during pregnancy, with a focus on their sources of stress and the compounding effects of intimate partner violence (IPV).

Design—A qualitative study using content analysis of research nurse's telephone logs from a large smoking cessation randomized controlled trial (N = 695) in which 33% of the sample (n = 227) experienced IPV in the past year.

Participants—Fifty pregnant women, 25 who had experienced IPV in the past year and 25 who had never experienced IPV, were randomly selected from those who received a nurse-delivered telephone intervention for smoking cessation (n = 345). The mean age of the sample was 22 years, and the majority were White and living in a married-like relationship.

Results—Women experiencing IPV discussed certain stressors significantly more often than non-abused women. These stressors included finances, lack of social support, legal issues, transportation issues, and abuse by the intimate partner and others.

Conclusion—Health care providers need to recognize that intimate partner violence creates a stress which can compound the stressors of pregnancy and poverty in rural areas. Offering these women a chance to talk about their lives can help them not only to locate necessary resources, but also to break down the barriers of isolation.

Keywords

abuse; domestic violence; pregnancy; stress; nursing intervention

Pregnancy is a time of great transition for the entire family, particularly the expectant mother. While most pregnant women will experience some common stresses such as body changes, concerns regarding labor and delivery, the baby's health and relationship with the father of the baby, some women experience extreme psychological stress. Severe psychological stress has been associated with increased risk of low birth weight (Knackstedt, Hamelmann, & Arck, 2005, Sable & Wilkinson, 2000) and with the risk of preterm birth, especially amongst women who have additional medical problems (Dole et al., 2003). Indirectly, stress may cause problems in pregnancy due to poor coping strategies resulting in high risk behaviors such as smoking cigarettes during pregnancy (Bullock et al., 2001), using illicit drugs (Martin, English, & Clark, 1996), or not performing adequate self care such as getting enough rest and seeking necessary medical care (Petersen et al., 1997).

For many women, an additional stress during pregnancy is intimate partner violence (IPV). The purpose of this study was to examine the stressors in the lives of rural pregnant women and compare the experiences of women who did and did not experience IPV during pregnancy and the immediate postpartum period.

Background

Intimate Partner Violence and Pregnancy

The prevalence of intimate partner violence ranges from 0.9% to 20.1% in all pregnancies (Gazmararian et al, 1996). Abuse during pregnancy has been associated with many adverse pregnancy outcomes (Curry, Perrin, & Wall, 1998, Kearney, Haggerty, Munro, & Hawkins, 2003, Murphy, Schei, Myhr, & DuMont, 2001, Sharps, Laughon, & Giangrande, 2007), including late entry into prenatal care (Dietz et al., 1997), preterm labor (Berenson, Wiemann, Wilkinson, Jones, & Anderson 1994, Jasinski, 2004), chorioamnionitis (Berenson et al., 1994), kidney infections (Boy & Salihu, 2004), fetal demise (Boy & Salihu, 2004, Ribe, Tegatz, & Harvey, 1993), hospitalization for antenatal complications (Bacchus, Mezey, & Bewley, 2004), increased incidence of substance abuse (Curry, 1998, Jasinski, 2004), and other health problems such as high blood pressure and sexually transmitted diseases (Huth-Bocks, Levendosky, & Bogat, 2002). Abdominal trauma caused by the physical abuse may lead to placental abruption, fetal fractures, fetal intracranial hemorrhage, and fetal-maternal transfusion (Petersen et al., 1997) and in some cases maternal death (Campbell, Garcia-Moreno, & Sharps, 2004).

CALLOUT 1—Abused women experience different stressors than non-abused women (Martin et al., 2001) and experience more stress, anxiety, and depression than those who are not abused (Talley, Heitkemper, Chicx-Demet, & Sandman, 2006). Rural women who experience IPV also experience unique barriers to safety (Few, 2005, Websdale, 1998) and are more severely abused with worse overall mental and general health than urban women

who experience IPV (Logan et al., 2003). This may be partially the result of unique beliefs and values of the rural culture that include a generally held patriarchal view of family, strong religious values, traditional sex-roles and conventional beliefs about privacy (Gagne, 1992; Websdale, 1998) as well as increased rates of poverty (Bauer, Braun, & Dyk, 2003; Simmons-Wescott & Braun, 2004), lack of resources (Shannon, 2006) and social isolation (Kohler, et al., 2004). Drawing from a sample of women who smoked during pregnancy, this study compared the stressors and experiences of women who did and did not experience IPV during pregnancy and the immediate postpartum period.

Methods

This study was part of a large randomized controlled trial of a smoking cessation intervention during pregnancy called Baby BEEP (Behavioral, Education, Enhancement of Pregnancy) that was conducted in twenty-one rural WIC (Women, Infant, and Children Nutritional Supplement Program) clinics in the Midwest (Bullock et al., in press). Nineteen of the twenty-one clinics were located in a city with less than a population of 20,000 persons. The other two clinics included the county with the university (city population of 96,000) and the adjacent county with a population of 40,000 persons. The study was approved by the University's Institutional Review Board. In order to qualify for WIC services, women must be at or below 185% of the poverty level. In this trial, 695 low-income pregnant women, who were smoking at least one cigarette a day since becoming pregnant, were randomized to one of four groups, two of which received a social support intervention ($n = 345$) that consisted of a weekly telephone call from the woman's research nurse plus twenty-four hour, seven days a week pager access to her nurse if she needed additional support. The intervention was purposively unstructured and the women could discuss anything they wanted to talk about with the nurse.

All women were screened for IPV face-to-face by a research nurse at baseline, late pregnancy and 6-weeks post delivery using the Abuse Assessment Screen (AAS) (Parker & McFarlane, 1991). The AAS is a self-report measure consisting of five items to assess if the woman has been emotionally, physically or sexually abused within her lifetime, the past year and during pregnancy.

Sample

The overall prevalence of current and/or in the last year intimate partner violence for the Baby BEEP ($N=695$) study was 32.6% ($n = 227$) over the three time periods (baseline to 6 weeks post delivery). Sixty-seven of these women (9.7%) experienced violence during pregnancy.

To select the participants for the qualitative study described here, women who received the social support intervention ($n = 345$) were categorized into one of two groups: those who screened positive for current or recent IPV ($n = 116$), defined as answering yes to Question 2, 3, and/or 4 on the AAS at any one of the three interviews and those who screened negative on all five questions on the AAS at all three interviews ($n = 42$).

Women who reported life time abuse but no current IPV were not included in this qualitative comparison study. Women from each group (recent abuse and no lifetime abuse) were then randomly selected from the research nurses' intervention groups' caseloads to obtain 25 women for each group. As seen in Table 1, the two groups were very similar and representative of their rural communities. The mean age was 22 years of age for both groups. The non-battered group was more likely to be married (80% vs. 64%) and White (96% versus 88%). The majority of both groups had a high school education, but 44% in both groups did not have a high school diploma or G.E.D.

Procedure

Before the Baby BEEP trial began, the research nurses had two weeks of intensive training by the Principal Investigator, Co-Investigators, and an expert nurse mental health consultant in delivering the telephone social support intervention and research protocols. As part of the training, nurses were instructed how to maintain notes of all conversations with the participants in their intervention case-load (Bullock et al., in press). Individual stressors were the focus of the Baby BEEP telephone social support intervention, and the operational definition of a stressor was any concern that a woman discussed with her nurse that in the nurse's professional judgment was causing the woman distress.

As part of the larger Baby BEEP study, the research nurses wrote field notes from all face-to-face contacts and logs for all telephone calls, which included nurse-initiated weekly calls and responses to pages. The telephone logs paraphrased the conversation and deliberately included a running account of stressors discussed with the women, including the stressors the woman discussed, ways in which they were trying to cope, and resources and/or information provided by the nurse to address the stressors. It is important to note that the telephone logs were the nurses' interpretations of the conversations. The number of logs reviewed for each participant varied, but the majority of women in the intervention groups received over seventy-five percent of their prescribed weekly calls (Bullock et al., 2007). The mean amount of time participants were in the study was 31 weeks, so women in the intervention groups would have an average of 32 weeks of telephone logs.

Analysis of the data—The first step involved one of the team members (A.L.) reading through a complete set of telephone logs for one participant positive for intimate partner violence and recording all examples of stressors reported by that woman. Only field notes of direct conversations between the nurses and participants were coded; other instances, such as when nurses spoke with women's family members, were not coded. The coding of the first set of telephone logs resulted in a list of eleven unique stressors. Eight additional categories of stressors as new facets of these women's lives appeared in other logs, for a total of 19 categories of stressors. Within these 19 categories is the category of "other", which was used only when women reported a stressor that was highly individual and not reported by other women, such as never having had the opportunity to meet her biological father. Inter-rater reliability was established between the two coders using a random sample of four logs. Each log was independently coded and then cross-checked, with an 88% inter-rater reliability.

The woman was noted to have a stressor if there was *one* documented example of any of the 19 stressors identified on the final coding list. Once a coder identified an example of a stressor, the woman was coded as having experienced it. For example, whether a woman described financial stress over the course of several interviews or only once, she was coded as having reported financial stress. Thus, the maximum number of women reporting a stressor was 25 per group.

A single reporting could be coded as more than one kind of stressor. For instance, if a woman said she was having trouble paying for car repairs and thus didn't have transportation, she was coded as having both financial and transportation stressors.

Findings

The number and percentage of women in each group ($n = 25$ per group) who were coded as experiencing the 19 codes can be seen in Table 2. The most common six stressors were the same for both groups, although the ordering was slightly different: the baby's health, job hardships, the woman's health, finances, other, and housing. Overall, women experiencing

intimate partner violence reported more of the 19 stressors. Over 50% of abused women reported 10 stressors compared to 7 stressors reported by 50% or more of non-abused women.

There were several stressors that only women with intimate partner violence reported experiencing, or experienced more than non-abused women. These are described by examples presented below from the nurses' written telephone logs. Names have been changed to maintain the confidentiality of the women.

Stress of abuse by intimate partner

Fifteen of the women in the IPV group and none of the non-abused women talked about abuse during the telephone conversations. Intimate partners were current or past partners, husbands or boyfriends. Abuse included physical violence, forced sex, emotional and verbal abuse. Five women spoke about the abuse that occurred in the past year or with past partners. For example, "She reported abuse from her ex-boyfriend and also abuse in the year before she was pregnant, which is different from her current abuse" and for another woman "Client reported abuse from her partner in the past year, since pregnant, and also currently reports emotional abuse from the man she is living with." The fact that women talked about past violence, as well as the current abuse, demonstrates that abuse lingered in their minds, in some cases even several years after they left that abuser. Notably, ten women who were experiencing intimate partner violence did not discuss their abuse during the telephone call at any point over the entire pregnancy and 6-weeks post-partum.

Stress of feeling scared or threatened by someone

Seven women in the IPV group and one non-abused woman mentioned feeling scared or threatened by a partner or someone that they knew, such as someone affiliated with partner, or someone she may have been acquainted with. As one would expect, women who were experiencing intimate partner violence developed fear of their abusers, and most of the women expressed this fear. One log entry read:

During the interview, it was apparent that she has been depressed and doesn't think very highly of herself at times. She also told me that she's been having problems with her husband because he's been drinking more. This is what led to him being physically violent with her the year before she was pregnant, and led to their temporary separation. She said that she is afraid of him sometimes and that he might get violent again.

In some cases the violence was life threatening, as Patricia reported, "She said that her boy friend had tried to find her and had threatened to kill her so that was why she was staying with her support group sponsor. He does not know where she is so she feels safe there". Due to the fear of the abusers, both Betty and Patricia changed their living arrangements, with Betty asking her mother to come and sleep with her and Patricia moving in to live with her sponsor. Threats of killing their partner or taking away the baby were likely used by the abusers to control and inculcate fear.

Stress of legal issues involving the client

Eleven women in the IPV group and one non-abused woman discussed legal issues, including contact with the police, probation officers, Division of Family Services (DFS), and court judges. Some of the legal issues discussed included: being jailed for stealing, writing bad checks; attending court hearings for drug dealings, engaging in verbal attacks, being on the verge of being arrested for picking petty fights, obtaining restraining orders for being stalked, and needing DNA test to determine the paternity. The legal issues of women

experiencing IPV were complicated and many stemmed from the abuse, involving the children as well. A nurse reported the following from Patricia, a woman experiencing IPV:

She told me how her partner had beat her up and she left. She took the baby to his mother's house so she (grandmother) could see her and she went to her Narcotics Anonymous meeting. When she came back her grandmother would not let the client have the baby. Her partner reported to DFS that she (client) was crazy and abusive and had borderline personality disorder and they put the baby in the custody of the grandmother. The client was extremely upset and has been trying to find a lawyer and help to try to get her baby back.

On the other hand, several of these women had encounters with the legal system which may not have been related to the abusive intimate relationship, such as going to court for assault charges against her or being jailed for writing bad checks.

Lack of social support

Eight women in the IPV group and one non-abused woman discussed not having adequate social support. Women discussed how they did not have anyone they could call when they needed help such as caring for the baby, needing to talk to another adult, moving residences, or getting rides to appointments. For example, the nurse for Betty, an abused woman, recorded, "She said that the doctor wants her to be on bed rest and she just can't because she has to take care of her daughter, she told me that she can't be on bed rest with a three year old and she doesn't have any one to help".

The nurse working with Laura, another woman experiencing IPV, reported, "She is also stressed by not having any friends nearby that she can talk to". Another woman experiencing IPV, whose partner's support was poor, planned with the nurse about help when she went into labor, "The client talked about her plans for when she goes into labor. She is out in the country without a phone and is by herself so I expressed concern about this. We talked about whom she could stay with or a neighbor whose phone she could use". In contrast, for non-abused women, their partner tended to be their main source of support, which would be expected living in rural isolated areas.

Stress of abuse from someone other than intimate partner

Seven of the women experiencing IPV talked with the nurse about abuse from someone other than their husband, partner, or boyfriend. None of the non-abused women reported this stressor. Several women mentioned being abused by their family members or by people they did not know. Family members included parents and in-laws. In the case of one woman, violence was from her mother, ex-husband, and current boy friend, and an unknown abuser. As reported by the nurse, "She was at a party and someone slipped her something and she was raped but has no memory of it and does not know who it was". Thus women experiencing IPV had multiple abusers and different types of abuse as well.

Stress of financial worries

Although financial worries were common in both groups, all but one woman in the IPV group reported financial stress, with 96% of the IPV group and 72% of the non-abused group discussing financial stressors with the nurses. Finances, or the lack of, were intertwined with other stressors. Some women needed extra money for buying a car to answer their transportation problems; others needed money for lawyer's fees for their own or their partner's legal fines or bonds to get out of jail. Several women shared stressors related to money for rent, phone bills, and utilities, such as gas and electricity. The inability to pay these often led to other serious consequences. One nurse recorded, "They shut the electricity off on Wednesday ... Her dad's check never came so they called a friend to

borrow \$100 and will go and pick it up today. She is hoping to have the electricity turned back on today or tomorrow". Another wrote: "My client has no money right now so she's afraid she's going to go into labor and there won't be a way to get to the hospital because there is no gas in the car".

Unemployment of self or her partner was a major stressor and aggravated the financial constraints. One nurse recorded: "I asked my client what was her biggest stressor right now and she replied that it is probably money. She told me that neither she nor her partner is working and that her Mom has to help them out some". In another example, a nurse wrote: "her husband made over \$2000 last month but had to pay \$1200 for his DWI (Driving While Intoxicated fine) and now he has to pay for a breathalyzer unit for his truck and get new tags".

Stress of transportation

Women in the IPV group, as well as the non-abused group, discussed stress regarding transportation, ranging from requiring a new vehicle, to vehicles needing repair, to restricted mobility hampering daily functioning that ultimately resulted in dependency on family members or partners. It was noted by the nurses when visiting the homes of the women that there was often more than one automobile in the yards of the homes, and none were in running condition. Whether the delay in repairing these broken cars was an additional means used by abusers to further isolate women could not be ascertained from the telephone logs, but seemed to be a real possibility to the nurses working on the project.

One nurse described what a woman in the IPV group told her: "She was going to be getting a job at the Dollar General Store and her husband called them (employer at Dollar General) and told them she didn't want the job, so they found someone else. 'I have no transportation, he wants me completely dependent upon him', she says". In another example, a nurse describes a client in the IPV group, "My client told me that she wishes she could work to help bring money in but then she would have to have child care and they only have one vehicle and that vehicle is actually a stick shift and she doesn't know how to drive a stick shift".

Not only did lack of transportation hamper women's daily functioning, but in the case of pregnant women experiencing IPV, it limited their access to the hospital at the time of delivery. Angela's nurse had to plan with her different strategies to reach the hospital when in labor. The solution agreed upon was to stay with her mother.

The transportation stressors of women experiencing IPV were more complicated and serious than found in the non-abused women's logs. For one non-abused woman, Amanda, the transportation stressor involved fatigue from too much driving: "She sounded tired and she is. She's been having to take her parents to work, then Eddie, then the kids to school, and then she has to pick them all up. One car is making it difficult, but it's working out. She's just tired of getting up so early. I validated her feelings of frustration". For another non-abused woman, the used car that she was excited about buying was better than the one they were currently driving, but it did not have drink holders. The nurse recorded, "I told her you can buy ones to put into cars that fit on the floor board, but she said she has tried those and she doesn't like having her partner turn a sharp corner and her drink spilling on her feet."

Discussion

The rich data found in the telephone logs from the Baby BEEP smoking cessation trial provides health care providers a rare opportunity to view particular problems in the lives of low-income, rural, pregnant women throughout the prenatal and postpartum period. After

establishing contact, the research nurses were able to develop a close and trusting relationship with women in the study. The research design of the telephone support intervention for rural women, and the caring, consistent support provided by the woman's research nurse, allowed this vulnerable group of women to share many aspects of their personal lives, giving a view of their reality that is rarely obtained in a clinical setting. Based on this study, all women share common concerns about the pregnancy, but for low-income rural women, especially those experiencing IPV, their concerns go far beyond what health care providers typically think of as major problems during pregnancy.

All rural pregnant women, whether or not they had experienced IPV, strived to be good mothers while living in poverty and managing with the scarce resources available. They faced many stressors commonly not felt by urban pregnant women, such as when in labor having to go great distances to reach a hospital and the possibility of impassable roads during the journey. They also lacked many of the resources enjoyed by urban women, such as public transportation, access to public housing or shelters, opportunities for employment, access to neighbors who live close enough to provide support when needed, and limited possibilities in obtaining help with basic needs of survival during financially hard times. For women experiencing IPV in rural areas, this lack of available resources may have further trapped them into staying in abusive relationships.

CALLOUT 2

Stressors discussed by more of the rural women experiencing IPV than those who were not abused were consistent with the IPV literature. Lack of financial security, lack of social support, and feeling scared are known to be hallmarks of abusive intimate relationships (Cloutier, et al., 2002, Davis, Taylor, & Furniss, 2001). Other stressors that seem logical extensions of the abuse included women's own legal issues, experiencing abuse by others in addition to their intimate partner, and transportation problems that extend beyond the ones typical in rural America, such as isolation, poverty and lack of resources (Bauer, Braun, & Dyk, 2003; Simmons-Wescott & Braun, 2004; Shannon, 2006; Kohler, et al., 2004).

CALLOUT 3

Although it cannot be determined whether the women's legal issues were directly related to IPV, writing bad checks could be a means of survival, since many of these women had severe financial difficulties, were not allowed to work outside the home, or had to pay for their abusive partners' alcohol-related issues. Another possibility is that some of these women were coerced by their abusers into performing illegal acts, such as buying or selling illegal drugs, and were afraid of not doing what he asked.

Others have found that women experiencing IPV are exposed to additional sources of violence (Campbell, Poland, Waller, & Ager, 1992). Bullock, Bloom, Davis, Kilburn and Curry (2006) found that 30% of women experiencing violence during pregnancy had been abused by someone other than the intimate partner. Women who are experiencing intimate partner violence may be less sensitized to violence and more open to discussing other violence occurring in their lives.

Transportation is a major problem for all rural residents, but in this study it limited the women's ability to move on in life. Road conditions in rural areas can be very poor, and even when roads are passable, rural residents face long commutes for health care and other resources (Bushy, 1998). Likewise, residents expect long delays when they call for public services, such as police support (Hilbert, & Krishnan, 2000). The lack of available public transportation also isolates residents. It is known that abusive partners frequently restrict women's transportation options by interfering with their ability to use a vehicle, such as

access to the vehicle (Adler, 1996), as was the case for the woman whose husband restricted her employment by denying her the use of the car. Other studies have found that abusers sabotage vehicles by removing necessary parts (such as spark plugs or the distributor cap) or flattening the tires (Holmes, 2001; Ridley et al., 2005), so our suspicion that this was happening to the women in our study is not unfounded.

Last, the finding that only half of the women in the IPV group talked about their abusive relationships may not be unique to rural pregnant women experiencing IPV. It is known that women in abusive relationships do not openly disclose abuse (Cloutier et al., 2002, Dienemann, Glass, & Hyman, 2005, Richardson & Feder, 1996), but after disclosure and with weekly contacts it was expected that the women would have discussed the abuse with their nurse. With pregnant women experiencing intimate partner violence, the situation may be more complicated. Pregnant women envisage a peaceful entry for their newborn and expect that they should be able to provide them a loving, two-parent, intact family. Here the concept of double binding comes into play (Lutz, Curry, Robrecht, Libbus, & Bullock, 2006). These authors suggest that a pregnant woman has an urge to bind with the abusive partner, by minimizing the violence or warning signs of violence, and putting more efforts into the relationship with the hope of improving the present situation to achieve an intact family for their unborn child. Thus pregnant abused women live in two disconnected worlds, the public one demanding the normal intact family life without abuse, and the private one with abuse (Lutz, 2005a, 2005b). It is remarkable that the nurses in this study, through regular weekly telephone contacts with the women, were able to build trust and enter into their private worlds for the majority of abused women.

Limitations—Although this was a secondary analysis of a larger quantitative study, every attempt was made to ensure the rigor of the content analysis that informed these results. Despite established interrater reliability, it is possible that some of the examples of stressors were missed or miscoded. The use of nurses' interpretation of the conversations in the telephone logs instead of a verbatim transcription of the women's voices is a limitation. Even though the data were the nurses' perception of the conversation rather than the women's voices, contact with the nurses and their documentation of their conversations and interactions with the women provided valuable insight into the concerns of low-income rural pregnant abused and non-abused women who want the best for themselves and their babies.

Another limitation is that with the choice of coding scheme it is not possible to report how often a woman discussed any one stressor with the nurse. Perceptions of stress are subjective and frequency of mention may not accurately reflect the severity or magnitude of a stressor.

Last, all women participating in the Baby BEEP study were smokers and their lives may be very different from women experiencing IPV who are not smokers, or those smokers that refused to participate in the larger Baby BEEP study. Future research will be needed to determine if there are differences between these groups of women and between rural and urban pregnant women.

Nursing implications—Pregnant rural women share common concerns about their health and that of their children. The amount of violence that these women are experiencing and the stress of coping with this violence should be of concern to health care providers. From this study, it is clear that women experiencing IPV have a multitude of stressors that they are trying to deal with, including the violence and the pregnancy. Nurses and other health care providers can be invaluable listening ears for these women. Moreover, rural nurses are often trusted members of their communities. They can help abused women to bridge the gap between informal helping networks, such as friends and family, and more formal networks, such as health care providers (Lauder et al., 2006). While providing safety planning and

resource information is important, health care providers must also recognize and discuss the other complicated facets of these women's lives before we can truly diminish the disparities of poverty and the effect of inadequate resources in rural areas that likely trap women in abusive relationships.

Rural abused women have legitimate concerns about sharing their stories of abuse. They often decline to talk about these issues due to feelings of shame, concerns about confidentiality, fear of gossip, and a history of reliance on supports other than health care, such as God, family and friends, and themselves (Kershner et al., 1999). Understanding the stressors these women face will enable health care providers to provide a caring voice and a non-judgmental perspective to women. All women benefit from being able to talk to someone, and when an abused woman realizes that she can build trust with her health care providers and gain assistance with resources, the barriers of isolation can be broken down.

Callouts

1. Abused women experience different stressors than non-abused women and experience more stress, anxiety, and depression than those who are not abused.
2. For women experiencing IPV in rural areas, lack of available resources may have further trapped them into staying in abusive relationships.
3. As trusted community members, rural nurses can help abused women bridge the gap between informal helping networks and formal networks such as health care providers.

Acknowledgments

Supported by Grant NINR R01NR05313. The authors thank the research nurses that participated in the study.

References

- Adler C. Unheard and unseen: Rural women and domestic violence. *Journal of Nurse-Midwifery*. 1996; 41(6):463–466. [PubMed: 8990718]
- Bacchus L, Mezey G, Bewley S. Domestic violence: Prevalence in pregnant women and associations with physical and psychological health. *European Journal of Obstetrics & Gynecology and Reproductive Biology*. 2004; 113:6–11. [PubMed: 15036702]
- Bauer, J.; Braun, B.; Dyk, P. Health and the economic well-being of rural families. 2003. Retrieved June 10, 2007, from http://www.ncfr.org/pdf/Rural_Families_Fact_Sheets.pdf
- Berenson AB, Wiemann CM, Wilkinson GS, Jones WA, Anderson GD. Perinatal morbidity associated with violence experienced by pregnant women. *American Journal of Obstetrics & Gynecology*. 1994; 170:1760–1769. [PubMed: 8203437]
- Boy A, Salihu HM. Intimate partner violence and birth outcomes: A systematic review. *International Journal of Fertility*. 2004; 49(4):159–163.
- Bullock L, Bloom T, Davis J, Kilburn E, Curry M. Abuse disclosure in privately and Medicaid-funded pregnant women. *Journal of Midwifery & Women's Health*. 2006; 51:361–369.
- Bullock L, Everett K, Mullen PD, Geden E, Longo D, Madsen R. Individualized social support from nurses via the telephone for poor, rural, pregnant smokers (Baby BEEP) versus mailed smoking cessation booklets: A 2 x2 factorial randomized controlled trial. *Maternal and Child Health Journal*. in press.
- Bullock L, Mears J, Woodcock C, Record R. Retrospective study of the association of stress and smoking during pregnancy in rural women. *Addictive Behaviors*. 2001; 26:405–413. [PubMed: 11436932]
- Bushy A. Health issues of women in rural environments: An overview. *Journal of the American Medical Women's Association*. 1998; 53(2):53–56.

- Campbell J, Garcia-Moreno C, Sharps P. Abuse during pregnancy in industrialized and developing countries. *Violence Against Women*. 2004; 10(7):770–789.
- Campbell J, Poland M, Waller J, Ager J. Correlates of battering during pregnancy. *Research in Nursing & Health*. 1992; 15:219–226. [PubMed: 1509114]
- Cloutier S, Martin SL, Moracco KE, Garro J, Clark KA, Brody S. Physically abused pregnant women's perceptions about the quality of their relationships with their male partners. *Women and Health*. 2002; 35(2/3):149–163.
- Curry MA. The interrelationships between abuse, substance use, and psychosocial stress during pregnancy. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*. 1998; 27(6):692–699.
- Curry MA, Perrin N, Wall E. Effects of abuse on maternal complications and birth weight in adult and adolescent women. *Obstetrics & Gynecology*. 1998; 92(4):530–534. [PubMed: 9764624]
- Davis K, Taylor B, Furniss D. Narrative accounts of tracking the rural domestic violence survivors' journey: A feminist approach. *Health Care for Women International*. 2001; 22:333–347. [PubMed: 11813783]
- Dienemann J, Glass N, Hyman R. Survivor preferences for response to IPV disclosure. *Clinical Nursing Research*. 2005; 14(3):215–233. [PubMed: 15995152]
- Dietz PM, Gazmararian JA, Goodwin MM, Bruce FC, Johnson CH, Rochat RW. Delayed entry into prenatal care: Effect of physical violence. *Obstetrics & Gynecology*. 1997; 90(2):221–224. [PubMed: 9241297]
- Dole N, Savitz DA, Hertz-Picciotto I, Siega-Riz AM, McMahon MJ, Beukens P. Maternal stress and preterm birth. *American Journal of Epidemiology*. 2003; 157:14–24. [PubMed: 12505886]
- Few A. The voices of Black and White rural battered women in domestic violence shelters. *Family Relations*. 2005; 54:488–500.
- Gagne PL. Appalachian women: Violence and social control. *Journal of Contemporary Ethnography*. 1992; 20:387–415.
- Gazmararian JA, Lazorick S, Spitz AM, Ballard TJ, Saltzman LE, Marks JS. Prevalence of violence against pregnant women. *Journal of the American Medical Association*. 1996; 275(24):1915–1920. [PubMed: 8648873]
- Hilbert J, Krishnan S. Addressing barriers to community care of battered women in rural environments: Creating a policy of social inclusion. *Journal of Health & Social Policy*. 2000; 12(1):41–52. [PubMed: 11067214]
- Holmes L. Domestic violence and economic stability: We can't tell a woman to leave unless we can tell her how to make a living [Electronic version]. *Wisconsin Coalition Against Domestic Violence*. 2001; 20(3):4–9. 30.
- Huth-Bocks AC, Levendosky AA, Bogat GA. The effects of domestic violence during pregnancy on maternal and infant health. *Violence and Victims*. 2002; 17(2):169–185. [PubMed: 12033553]
- Jasinski JL. Pregnancy and domestic violence: A review of the literature. *Trauma, Violence, & Abuse*. 2004; 5(1):47–64.
- Kearney M, Haggerty L, Munro B, Hawkins J. Birth outcomes and maternal morbidity in abused pregnant women with public versus private health insurance. *Journal of Nursing Scholarship*. 2003; 35:345–349. [PubMed: 14735677]
- Kershner M, Long D, Anderson JE. Rural aspects of violence against women. *Minnesota Medicine*. 1999; 82:41–47.
- Knackstedt MK, Hamelmann E, Arck PC. Mothers in stress: Consequences for the offspring. *American Journal of Reproductive Immunology*. 2005; 54:63–69. [PubMed: 16105097]
- Kohler J, Anderson E, Oravec L, Braun B. Relationship Constellations and Dynamics of Low-Income Rural Mothers. *Affilia*. 2004; 19:160–173.
- Lauder W, Reel S, Farmer J, Griggs H. Social capital, rural nursing, and rural nursing theory. *Nursing Inquiry*. 2006; 13(1):73–79. [PubMed: 16494669]
- Logan T, Walker R, Cole J, Ratliff S, Leukefeld C. Qualitative differences among rural and urban intimate violence victimization experiences and consequences: A pilot study. *Journal of Family Violence*. 2003; 18(2):83–92.

- Lutz K, Curry M, Robrecht L, Libbus M, Bullock L. Double binding, abusive intimate partner relationships, and pregnancy. *Canadian Journal of Nursing Research*. 2006; 38(4):118–134. [PubMed: 17290958]
- Lutz KF. Abused, pregnant women's interactions with health care providers during the childbearing year. *JOGNN*. 2005a; 34:151–162. [PubMed: 15781592]
- Lutz KF. Abuse experiences, perceptions, and associated decisions during the childbearing cycle. *Western Journal of Nursing Research*. 2005b; 27:802–824. [PubMed: 16275702]
- Martin SL, English KT, Clark KA. Violence and substance use among North Carolina pregnant women. *American Journal of Public Health*. 1996; 86(7):991–998. [PubMed: 8669524]
- Martin SL, Griffin JM, Kupper LL, Petersen R, Beck-Warden M, Buescher PA. Stressful life events and physical abuse among pregnant women in North Carolina. *Maternal and Child Health Journal*. 2001; 5(3):145–152. [PubMed: 11605719]
- Murphy CC, Schei B, Myhr TL, DuMont J. Abuse: A risk factor for low birth weight? A systematic review and meta-analysis. *Canadian Medical Association Journal*. 2001; 164(11):1567–1572. [PubMed: 11402794]
- Parker B, McFarlane J. Nursing assessment of the battered pregnant women. *MCN: American Journal of Mother and Child Nursing*. 1991; 16:161–164.
- Petersen R, Gazmararian JA, Spitz AM, Rowley DL, Goodwin MM, Saltzman LE, Marks JS. Violence and adverse pregnancy outcomes: A review of the literature and directions for future research. *American Journal of Preventive Medicine*. 1997; 13(5):366–373. [PubMed: 9315269]
- Ribe JK, Teggatz JR, Harvey CM. Blows to the maternal abdomen causing fetal demise: Report of three cases and a review of the literature. *Journal of Forensic Sciences*. 1993; 38(5):1092–1096. [PubMed: 8228881]
- Richardson J, Feder G. Domestic violence: A hidden problem for general practice. *British J of General Practice*. 1996; 00:239–242.
- Ridley, E.; Rioux, J.; Lim, KC.; Mason, D.; Houghton, KF.; Luppi, F.; Melody, T. Domestic violence survivors at work: How perpetrators impact employment. Maine Department of Labor & Family Crisis Services. 2005 October. Retrieved on June 7, 2007 from http://www.maine.gov/labor/labor_stats/publications/dvreports/survivorstudy.pdf
- Sable MR, Wilkinson DS. Impact of perceived stress, major life events, and pregnancy attitudes on low birth weight. *Family Planning Perspectives*. 2000; 32(6):288–294. [PubMed: 11138865]
- Shannon L, Logan TK, Jennifer C, Medley K. Help-seeking and coping strategies for intimate partner violence in rural and urban women. *Violence And Victims*. 2006; 21(2):167–181. [PubMed: 16642737]
- Sharps P, Laughon K, Giangrande S. Intimate partner violence and the childbearing year: Maternal and infant health consequences. *Trauma, Violence, & Abuse*. 2007; 8(2):105–116.
- Simmons-Wescott LA, Braun B. Depression: A deterrent to psychological well-being among poor, rural mothers. *National Council on Family Relations Focus on Mental Health Over the Life Course*. 2004; 49:F5–F7.
- Talley P, Heitkemper M, Chicx-Demet A, Sandman CA. Male violence, stress, and neuroendocrine parameters in pregnancy: A pilot study. *Biological Research for Nursing*. 2006; 7:222–233. [PubMed: 16552950]
- Websdale, N. *Rural women battering and the justice System: An ethnography*. Thousand Oaks, CA: Sage; 1998.

Table 1

Characteristics of Abused and Non-abused Low-Income Rural Pregnant Women (N = 50)

Category	Abused (n = 25)	Non Abused (n = 25)
Mean Age (Range)	22.9 (18–34)	21.9 (18–30)
Number of Married % (n)	64 (16)	80 (20)
<u>Education</u>		
High School diploma or G.E.D (%)	56 (14)	56 (14)
No High School Diploma or G.E.D (%)	44 (11)	44 (11)
<u>Ethnicity</u>		
White (%)	88 (22)	96 (24)
African American (%)	12 (3)	4 (1)

Table 2
Stressors Reported by Abused and Non Abused Rural Women to Research Nurses (N = 50)

Category	Abused Group (n = 25)		Non Abused Group (n = 25)	
	%	#	%	#
Baby's Health	100	(25)	96	(24)
Job Hardships	96	(24)	92	(23)
Client's Health	96	(24)	88	(22)
Finances	96	(24)	84	(21)
Other Topics	88	(22)	80	(20)
Housing	84	(21)	72	(18)
Conflict with Someone Inside the family	80	(20)	64	(16)
Transportation	64	(16)	48	(12)
Abuse	60	(15)	40	(10)
Conflict with Partner	56	(14)	32	(8)
Conflict with Someone Outside the Family	48	(12)	28	(7)
Baby's Siblings	44	(11)	16	(4)
Client's Legal Issues	44	(11)	12	(3)
Partner's Health	36	(9)	8	(2)
Lack of Support	32	(8)	4	(1)
Scared or Threatened	28	(7)	4	(1)
Abuse by Someone				
Other Than Partner	28	(7)	4	(1)
Partner's Legal Issue	28	(7)	0	0
Isolation	20	(5)	0	0