Battering During Pregnancy:
A Prevalence Study

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Abstract

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This study was a descriptive, non-experimental design conducted to address three goals: 1) To demonstrate the prevalence of physical abuse during pregnancy, 2) to identify whether or not relationships exist between a woman's age, ethnicity, marital status, education level, and the occurrence of battering, 3) to ascertain who women identify as potential helping resources if concerned about abuse. A convenience sample of 127 women were recruited from two clinics within a public university hospital system. Data was obtained via a self-report questionnaire administered as part of a routine prenatal visit. Study findings include: 27.5% of women reported abuse within the last year, and 15.2% during their current pregnancy. There were no significant differences in demographic data between battered and non-battered women or in whom they identify as helping resources. Although the findings are limited by a homogenous sample, the high rate of abuse suggests the need for consistent assessment and potential intervention by all health care practitioners providing prenatal care.

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Introduction

The use of violence as a means of resolving interpersonal problems is an enigmatic concern of contemporary living. While the media may shock us with graphic presentations of the most heinous crimes, it is easy to remain apathetic when the faces and places are remote. However, it becomes increasingly difficult to ignore the fact that violence is no longer a stranger but is occurring in epidemic proportions. Pioneering survey data show that, in 1975, 16.0 percent of all couples experienced intracouple violence, and that 12.1 percent of adult married women in the United States were being abused by their husbands (Gelles, 1975). In repeated measurement of survey data conducted 10 years later, there was no significant change in the incidence of domestic violence among married couples. Approximately 6.1 million women were involved in abusive relationships with their husbands. (Straus & Gelles, 1986). Further, in studies of battered women in the general population (single as well as married women) estimates of domestic violence against women range from 1-12 million incidences per year (Bohn, 1990). As former Surgeon General C. Everett Koop (1986) stated, domestic violence is "an overwhelming moral, economic, and public health burden."

As the majority of battered women are of the childbearing age, pregnancy becomes one of the most vulnerable times in a woman's life for experiencing abuse. "Depending on the population surveyed and the number of questions asked, reports of abuse during

pregnancy vary from 3-8% (McFarlane, Parker, Soeken, & Bullock, 1992)." This prevalence indicates that battering during pregnancy is a more common complication than gestational diabetes and comparable to that of intrauterine growth retardation and preterm labor.

Pregnancy may be the only time in a woman's life when she has frequent, regular, scheduled contact with health care providers. Identification, assessment, education, referral, and advocacy are intervention strategies to interrupt the cycle of violence, prevent further abuse and promote the health and safety of mother and child. It is essential, therefore, that health care providers who have contact with women of childbearing age become familar with the existing research regarding domestic violence and its detrimental impact on maternal, fetal, and neonatal health.

Review of the Literature

Sociologist Richard Gelles was the first to address the issue of battering during pregnancy (Gelles, 1975). Following his lead, much research has mentioned abuse during pregnancy (Dobash & Dobash, 1979; Flynn, 1977; Gelles, 1975). More recently there have been at least five studies focused exclusively on describing abuse during pregnancy.

Consider the descriptive study conducted by Hillard (1985). Within a sample of 742 antepartal women, there was a 10.9% rate of self-reported abuse using an interview approach. This study was conducted at a single clinic in Virginia which provided prenatal care to

a population of predominantly low-income women. Therefore, it has inherent limitations to its generalizeability. Additionally, her findings were based on a single verbal yes or no question. Due to the sensitive nature of the information the investigator was trying to elicit, one would expect under-reporting. Finally, Hillard states that "Although the solutions to the problems of abused women are complex, the identification of abuse by a physician can be a first step (Hillard, 1985)."

Another prevalence study was conducted by Helton and Snodgrass (1987) using a 19-item questionnaire available in both English and Spanish. Among 290 antenatal women randomly selected from private and public clinics, they found that 15% reported history of battering prior to pregnancy. Additionally, 8% reported abuse during the current pregnancy and 11% had been threatened with violence (Helton & Snodgrass, 1987).

One important inclusion in the Helton and Snodgrass (1987) study was the assessment of helping resources identified by the pregnant battered woman. They found that the majority of respondents (63.8%) could not identify any resources to assist an abused woman. Of the women who could identify a helping resource, only 5 non-battered and no battered women identified health care providers. If women are uninformed or intimidated by health care providers, they are unlikely to seek or accept help (Helton & Snodgrass, 1987).

More recently, Campbell, Poland, Waller, and Ager (1992) conducted a retrospective study on battering during pregnancy. They interviewed a convenience sample of 488 women, 2-5 days postpartum, at 5 midwestern metropolitan hospitals. Their purpose was to assess the prevalence of domestic violence during pregnancy as well as to ascertain correlations between incidence of abuse and various demographic, sociologic and emotional variables (Campbell, Poland, Waller, & Ager, 1992). Their sample consisted of three groups: Women abused by their partner during pregnancy, women abused by their partner prior to pregnancy (preconceptionally), and women abused by someone other than their partner either before or during pregnancy (Campbell et al., 1992).

Results of the Campbell, Poland, Waller and Ager study indicated a 7% prevalence of abuse during pregnancy, similar to that found in other studies. In addition, depression, anxiety, housing problems, drug and alcohol use, and inadequate prenatal care were significantly correlated with battering. Also, participants who were abused by their partner during pregnancy showed an increased severity of these problems; greater than either women who were abused preconceptionally or by someone other than their partner (Campbell et al., 1992). In the authors' discussion of their results they point to the need for further research involving more in-depth evaluation of the potential relationships that may exist between such variables. They hesitate in labeling these relationships causal (ie.;

battered women are more depressed, battered women use more alcohol etc.) until further exploratory research can be done.

Through the use of secondary analysis of survey data, and two verbal abuse assessment questions, Sampselle, Petersen, Murtland, and Oakley (1992) gathered abuse information from 940 antenatal women in private Certified Nurse-Midwife (CNM) and physician practices. They found that 9.7% of the subjects had a history of abuse prior to pregnancy, although only 0.9% were currently in an abusive relationship (Sampselle, Petersen, Murtland, & Oakley, 1992).

The subjects experiences with violence were evaluated with regard to income, education, and type of health care provider selected (MD or CNM). Results indicated that lower annual income was suggestive of a currently abusive relationship but not of a past history of abuse. In addition, women experiencing abuse were, on the whole, less educated than their non-abused counterparts (Sampselle et al., 1992).

Considerable limitations to this study include the use of secondary analysis and the period in which the women were assessed for abuse during pregnancy. As the assessment questions were posed at the initial prenatal visit, underreporting of abuse during pregnancy may have occured simply as a function of questionnaire timing. Had the women been assessed either by repeated measure, or simply later in their pregnancy, pregnancy course findings more comparable to those of other studies might have been achieved.

Finally, McFarlane, Parker, Soeken, and Bullock (1992) used a stratified prospective cohort analysis to assess for abuse during pregnancy. A convenience sample of 691 antenatal women was gathered from public prenatal clinics in Houston, Texas and Baltimore, Maryland. A 17% prevalence rate was detected through the use of a 3-question abuse assessment tool. This rate is twice as high as that documented in previous studies. Their study yielded a portrayal of battering which included a theme of recurrent abuse. Sixty percent of the subjects reported two or more episodes of violence. In addition, they were able to dicern that the head region was most often the site of injury. Lastly, they established that abused women were twice as likely to initiate prenatal care during the third trimester and that abused white women were at appreciably greater risk of homicide when evaluated with Campbell's Danger Assessment (McFarlane et al.,1992).

This review of the literature establishes the prevalence of domestic violence during pregnancy in the United States. However, few quantitative studies exist to document physical outcome of abusive events. Several authors have provided anecdotal evidence to support the existence of fetal injuries, such as intracranial hemorrage and increased risk of miscarriage, as direct results of battering (Gelles, 1975; Morey, Bigleiter, & Harris, 1981; Stark, Flitcraft, & Frazier, 1979). Tibial deformity, hip dislocation, and scleral opacities have also been noted (Pugh, 1978).

Most recently, researchers have documented adverse pregnancy and fetal outcomes as a result of blunt abdominal trauma during pregnancy. An increased risk of spontaneous abortions, preterm labor, abruptio placenta, fetomaternal transfusion, and stillbirth have been established in pregnant women experiencing this type of insult (Pearlman, Tintinalli, & Lorenz, 1990a). Noteworthy is the fact that such pregnancy complications often occur with greater frequency and severity after battering to the abdominal region than trauma after a motor vehicle accident or a fall (Goodwin & Breen, 1990).

Further, it has been established that insult to the uterus may cause uterine contractions and premature rupture of the membranes predisposing a woman to preterm delivery and ascending uterine infection. Such factors directly correlate with an increased risk of fetal pulmonary hypoplasia, overwhelming fetal sepsis, and delivery of either preterm or fullterm low birthweight infants with subsequent effects on the infants survival, growth, and development (Bullock & McFarlane, 1989; Pearlman, Tintinalli & Lorenz, 1990b).

What is well documented is the deleterious effect that violence has on a woman's mental health. In a study comparing 97 battered women with 96 non-battered women, those who were battered displayed more frequent symptoms of stress and grief (Campbell, 1989). Isolation from others, low self-esteem, anxiety, depression, increased alcohol or drug use, emotional problems, pain

and injury, permanent physical damage and even death are other identified effects from battering (Amaro, Fried, Cabral & Zuckerman, 1990; Helton, 1986; Mullen, Walton, Ramons-Clarkson & Herbison, 1988).

In summary, domestic violence during pregnancy victimizes both the abused woman as well as the unborn fetus. Literature suggests that the incidence of battering during pregnancy is not only underrecognized but contributes considerably to direct physical morbidity and even fetal mortality. Additionally, domestic violence may lead to one or more intermediate risks including depression, increased psychological stress, isolation, inadequate prenatal care, or deleterious health behaviors such as tobacco and alcohol use. The association between such risks and poor obstetrical outcome is well documented and convincing (Newberger, Barkan, Lieberman, McCormick, Yllo, Gary, & Schechter, 1992). Potential for poor obstetrical outcome obligates the health care provider to consider the range of consequences battering during pregnancy may result in and necessitates their direct, comprehensive, and thoughtful involvement in assessment.

Conceptual Framework

Previous work with battered women in the general population has revealed a startling and consistent pattern. Lenore Walker (1979) was the first to describe the cycle of violence which has three phases. During Phase I there is a gradual increase in tension, anger, blaming,

and arguing. This leads to Phase II in which the battering incident erupts. It is a tension release for the batterer and consists of a display of aggression. This may involve hitting, slapping, kicking, choking, use of a weapon, and/or sexual abuse. Verbal threats are common. After such an episode, the tension has been released and there is a period of calm. In Phase III, the abuser may deny the violence, or may try to excuse it as related to alcohol or drug use. He may be remorseful and make promises that this will never happen again (Walker, 1979). Appendix A depicts a conceptualization of Walker's cyclic theory of violence (Helton & Snodgrass, 1987).

Studies have shown that the violence does happen again, and again. In fact, over time the cycle is not only likely to repeat itself but the progression through the phases tends to occur more rapidly. There are longer episodes of violence and shorter periods of calm. Perinatal care providers are in a position to interrupt this cycle of violence at any point using primary, secondary and tertiary strategies as suggested by Walker (1979).

Primary prevention strategies involve education. Education involves the client by providing a forum for discussion in prenatal visits as well as in childbirth education classes. Primary prevention includes the general population through involvement in legislative channels which guide societal response to battering, and it includes the research community through efforts of investigation and definition of the problem (Walker, 1979).

Secondary intervention involves the caregiver's obligation to screen women for battering, providing early detection and crisis intervention. It means taking the time to refer or provide counsel. It involves naming the problem (Walker, 1979).

Finally, tertiary intervention includes referring women to shelters, assisting them in conferring with family, establishing support networks, and providing patient advocacy (Walker, 1979).

The first step toward intervention is problem identification. Studies to establish the prevalence of violence provide documentation of a serious public health problem. Health care providers must recognize the dimensions of battering during pregnancy, while affected women must also recognize the provider as a resource for help. Therefore, based on the belief that change can occur only after this mutual recognition, the following study was suggested with two goals in mind:

1) to establish the prevalence of abuse during pregnancy in all return antepartal clients at two clinics in a large university hospital in Portland, Oregon, and

2) to ascertain whom women identify as a helping resources if they are worried or concerned about abuse.

Research Methodology

Research Questions

1) Do women identify interpersonal violence as an event which has occurred during their lives in the past year and/or during their pregnancy?

2) Who do women identify as a helping resources in dealing with abuse?

Design

This study was an exploratory descriptive non-experimental design meant to be a first step in recognizing the phenomena of battering during pregnancy. It is necessary to obtain this information before any effective intervention or hope for lasting change can exist.

Variables

This study sought to demonstrate the prevalence of physical abuse during pregnancy. In addition, the researchers hoped to identify whether or not relationships exist between a woman's age, ethnicity, marital status, educational level, and the occurrence of male to female interpersonal violence during pregnancy. A final goal was to ascertain who women identify as potential helping resources.

Subjects and Setting

A convenience sample of 127 women were recruited from a nurse-midwifery practice (n=49) and an obstetric practice (n=78) at a university hospital clinic in Portland, Oregon. The clinics primarily served clients on public assistance but occassionally included self-pay

clients or university students.

Measurement

A self-report questionnaire with 17 yes-no items was used for data collection (see Appendix B). The measure was a blend of two previously used tools combined with six demographic questions. Specific items of the Abuse Assessment Questionnaire (Parker & McFarlane, 1991) were selected to identify the existence of abuse. Items 1, 2, 3, 8, and 9a of this study's questionnaire pertained to identification of battering incidents. Items from the Danger Assessment (Campbell, 1986) were included for qualification and to predict escalation. Items 4, 5, 6, 7, 9b, and 10 aimed to qualify the identified battering. Item 11 asked the woman to identify resources from 13 listed (e.g., mother, female friend, doctor). Finally items 12 through 17 elicited demographic information.

The Abuse Assessment Questionnaire (Parker & McFarlane, 1991) possessed content validity and reliability but the specific values are not reported in the literature. Campbell's (1986) Danger Assessment had an alpha coefficient of 0.71 to demonstrate reasonable reliability. Content validity of the tool was supported by battered women, shelter workers, law enforcement officials and other experts on battering. Construct validity was confirmed through a pilot study using the tool with battered women in shelters (Campbell, 1986). Items borrowed from these measures were essentially unaltered with the purpose of maintaining each tool's established

reliability and validity. Written permission was obtained from the respective authors for use of their tools.

Procedure

The Human Research Committee at Oregon Health Sciences University (OHSU) approved the study. Meetings were held with the heads of both obstetrics and nurse-midwifery departments, the clinic manager, and the clinic staff to share information on the study's purpose and procedural intent.

Three registered nurses who were master's students in the family nursing department at OHSU collected the data. The questionnaire was administered to English speaking women during a return obstetric visit. To ensure the woman's safety, recognizing all women to be potentially at risk for abuse, a subject was approached for participation only if the researcher was able to do so with the woman apart from her male partner. If accompanied by a partner to the examination room, the woman was approached enroute to the lavoratory. Examination rooms adjacent to the lavoratory disallowed privacy for informed consent, thus some women were unable to be approached and subsequently excluded from participation.

Upon introducing themselves and the study, researchers informed potential participants that participation was voluntary, would take five to ten minutes of their time, and involved filling out a questionnaire that would remain confidential. Upon agreeing to participate, the researchers handed the questionnaire and cover letter

(see Appendix C). Also attached was an envelope and business card containing phone numbers of crisis-lines, counseling and legal services, advocacy groups, and women's shelters (see Appendix D). The researchers instructed participants to seal the questionnaire within the provided envelope upon completion and return it to the researcher, clinic staff, or to leave it in the room in which they filled it out. They were also invited to take the resource card for their own benefit or the potential benefit of an acquaintance. Additionally, the researchers encouraged the women to speak with their health care providers or a resource listed on the resource card if, in completing the questionnaire, concerns or issues arose. The women were then left to complete the questionnaire in private.

Of the attached resource cards, 104 women took the cards. If a woman openly discussed battering as a current phenomenon, the researcher verbally assessed her current danger, the woman's resources, and presence of a plan for exit or a plan to call for help. The researcher confirmed the woman's knowledge of and access to a resource before terminating contact with her. No immediate referrals to shelters were made.

The researchers were unable to recruit 29 eligible women for the study. Twenty-one women required an interpreter, five were unapproachable apart from their partners, and two women had psychiatric limitations (schizophrenia) and stated they did not feel well enough to complete a questionnaire. Only three women refused

to participate for undisclosed reasons. One questionnaire, which was positive for four incidences of abuse in the last year, was not included in the data analysis due to missing data.

Results

Sample

The age of participants ranged from 15 to 39 with the mean age of 24.48 years. Pregnant women under 18 were excluded from the study unless financially emancipated from their parents. To have included women under the age of 18 would have necessitated the consent of their parent or guardian who not always accompanies the woman to prenatal visits. Mean years of school completed was 11.6 years with a range of 0 to 20 years. Twenty-nine percent (n=37) of the women considered themselves single, 48.4% (n=61) were married, 15% (n=19) lived with a partner, 3.1% (n=4) were separated, 3.1% (n=4) were divorced, and 1% (n=1) was widowed. Range of years in their current relationship was 0.08 to 14 years with a mean of 3.8 years. The racial and ethnic distribution of the sample was as follows: white, 107 (84.2%); black, 12 (9.5%); Hispanic, 2 (1.6%); American-Indian, 2 (1.6%); Asian, 2 (1.6%); and Pacific Islander or other, 2 (1.6%). Range of weeks gestation at time of participation was 12 to 40 weeks, with a mean of 28.3 weeks (standard deviation=7.62).

Research Question #1

Of the 127 pregnant women , 35 (27.5 %) reported that they had been battered at some point in the past year and twenty women

(15.2%) disclosed that they had been abused during their current pregnancy as well. Of those 35 women that reported abuse, 17 (48.5%) were currently in a relationship with their abuser. Six (35.2%) considered themselves threatened, 3 (17.6%) considered the abuse to be increasing in severity, 5 (29.4%) had been forced into undesired sexual relations, and 3 (17.6%) described their partner as violently and consistently jealous. Of interest, but not directly related, eight women (22.8%) reported that they had attempted suicide at some point in their past.

Table 1 profiles the demographic characteristics of the women in the study population differentiating between abused women and non-abused women.

Table 1

Characteristics of Women Battered During the Last Year, Battered During Pregnancy, and Non-Battered Women

Characteristics	Battered During Last Year (n=35)	Battered During Pregnancy (n=20)	Non-Battered (n=92)	Total (n=127)
Race/Ethnicity				
% Black	20.0	10.0	5.4	9.4
% White	77.1	85.0	86.9	84.2
% Hispanic	2.9	5.0	1.1	1.6
% Asian	0.0	0.0	2.2	1.6
% American Indian	0.0	0.0	2.2	1.6
% Other	0.0	0.0	2.2	1.6
Mean Age (years)	23.9	22.7	24.8	24.4
Marital Status				
% Partnered$_1$	37.1	45.0	72.8	63.0
% Single$_2$	62.9	55.0	27.2	37.0
Mean Education (years)	11.5	12.1	11.7	11.6
Mean Time in the Relationship (years)	2.6	3.0	4.2	3.8
Mean Weeks Pregnant	27.2	25.1	28.8	28.3

Note. 1. 'Partnered' includes married women and those living with a partner.

2. 'Single' includes single, divorced, widowed, and separated.

No significant difference existed between groups in either age, ethnicity, educational level, length of time in relationship or gestational age. Women who had been battered in the past year (including during pregnancy) were more likely to be single (single, divorced or widowed) rather than partnered [married or living with a partner ($p=0.0001$)]. The perpetrator of the abusive incident was almost always an intimate aquaintance (ie.; husband, boyfriend, or ex-boyfriend). Only two women reported multiple perpetrators of abuse. In both cases one was a stranger, and the other an intimate.

Women abused in the past year were assaulted an average of 3.5 times (range 1-12 times). Of those women who reported abuse during pregnancy the average number of incidences during pregnancy was 2.3 times (range 1-5 times). Women in this study were twice as likely to be victims of recurrent or multiple episodes of abuse rather than a single incident.

Each woman who indicated she had experienced abuse in the last year was asked to score her most recent incident using the scale on the abuse assessment screening tool. Higher scores indicated increasing severity and although the episode may have included a variety of assaults, she was asked to indicate the highest number that applied. Although each subject was only counted once, if the violent episode included multiple focal points all were counted. Two women indicated that they had experienced abuse but did not complete the body map section.

The majority of abuse was focused on the head, neck, and face region and included mainly slapping, pushing, punching and kicking. This is consistent with the results of the 1992 McFarlane, Parker, Soeken, and Bullock study concerning focus of abuse. Of the 33 women who completed the body map, 9 episodes of injury were rated $\geq$ 4 on the severity scale. This is indicative of severe trauma including broken bones, permanent injury, and wounds from a weapon. Six women reported assault to the abdomen which involved either punching or kicking. Figure 1 presents the frequency of abuse sites in 33 battered women.

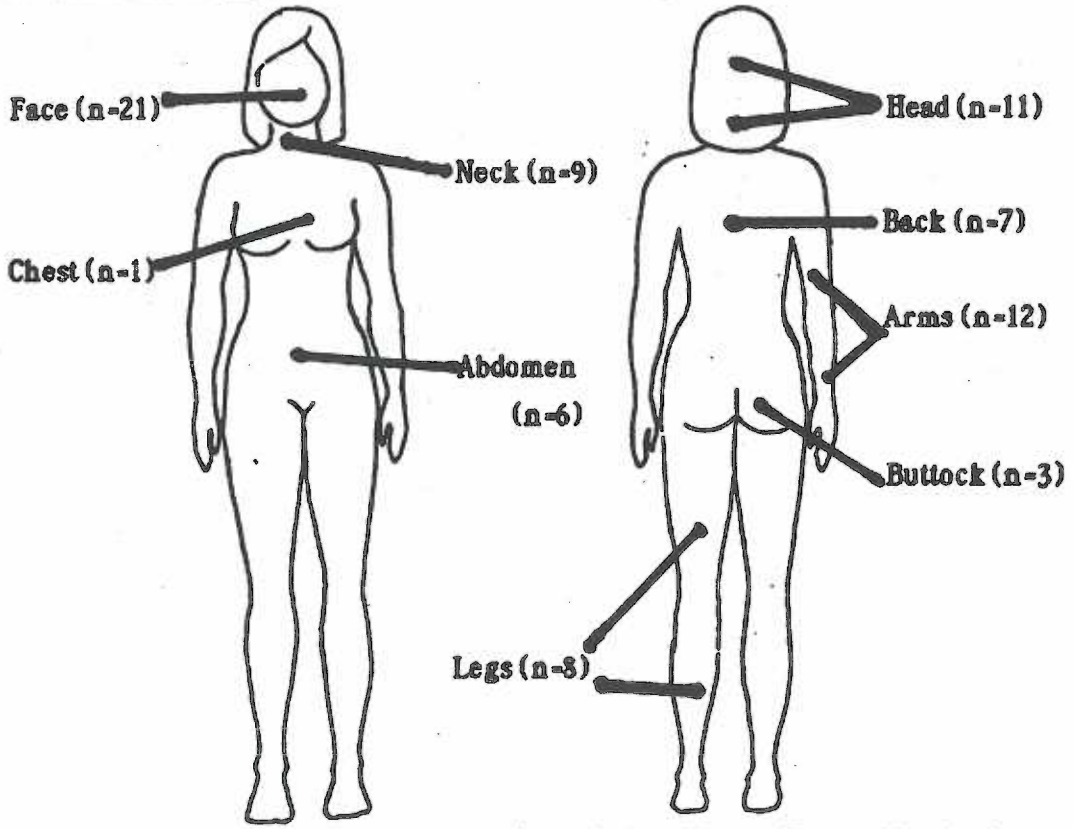

Figure 1. Frequencies of Sites of Abuse (n-78) of 33 Women Battered in the Last Year

Research Question #2

All participants were asked to identify whom they would call if they were abused or worried about abuse. One-hundred and twenty-six women responded to this section of the questionnaire and most identified more than one resource. Table 2 outlines the resources the study population identified in rank order.

Table 2

Resources for Battered Women Which Pregnant Women Identified They Would Use if They Were Abused or Concerned About Abuse

	Battered (n=35)		Nonbattered (n=91)		Totals (n=126)	
Resource	(n)	(%)	(n)	(%)	(n)	(%)
Mother	20	57.1	55	60.4	75	59.5
Female friend	18	51.4	63	69.2	81	64.3
Sister	13	37.1	34	37.4	47	37.3
Father	9	25.7	23	25.3	32	25.4
Brother	8	22.9	23	25.3	31	24.6
Other	8	22.9	22	24.2	30	23.8
Aunt	8	22.9	12	13.2	20	15.9
Doctor	7	20.0	24	26.4	31	24.6
Grandparent	7	20.0	15	16.5	22	17.5
Male friend	6	17.1	22	24.2	28	22.2
Uncle	5	14.3	8	8.8	13	10.3
Midwife	3	8.6	18	19.8	21	16.7
Clergy	0	0.0	20	22.0	20	15.9

Discussion

Early domestic violence research was carried out in womens' crisis shelters and yielded an important description of a battered woman. However, the actual prevalence rates did not adequately address the scope of this societal dilema. Few women involved in abusive relationships actually seek protection from violence at a shelter, but weather the crisis within their own homes. Thus the early prevalence rates established were not inclusive of society as a whole but describe the population of women who sought safety in shelters. Recent research in the general pregnant population has reported a prevalence rate of abuse at 3-8% (Hillard, 1985; Helton, 1986; Helton & Snodgrass, 1987).

In a 1992 landmark study, McFarlane et al. documented a prevalence of abuse during pregnancy of 17%, more than twice that of any other study. This study's finding of a 15.7% prevalence is comparable to McFarlane's using extremely similar questions. An important difference between the studies is that McFarlane et al. used interview approach and this study used an anonymous questionnaire. There is a single study which sought to test the efficacy of interview versus questionnaire. Initially, the authors added four abuse assessment questions to their standard intake forms completed by all new patients. Self-report data was collected from 477 women in a one month period. Then to form a comparison, the same four questions were administered verbally to 300 women from the same clinic

setting. Results revealed a 4 times greater disclosure rate with interview technique thus suggesting interview a more appropriate method of detecting domestic violence. (McFarlane, Christoffel, Bateman, Miller, and Bullock, 1991). The findings of our study pose the question of whether questionnaire is as valid a technique as interview, or if not, is the rate of domestic violence on the rise and being inadequately detected.

A concern is that of the 127 questionnaires completed, only 23 were returned with the domestic violence resource card attached. The question this poses is whether or not this study failed to accurately detect the actual rate of battering during pregnancy. Is the high percentage of cards taken indicative of women who failed to disclose battering when they were in fact involved in an abusive relationship, or does it reflect a high prevalence of domestic violence in women in a population outside of the sample such as their relatives or aquaintences?

Challenges to Research

There were several challenges to overcome prior to initiation of this study. The Intitutional Review Board at Oregon Health Sciences University hospitals had multiple concerns about this study's methods. Issues of informed consent, subject safety as well as the need for the researchers to potentially provide intervention in a crisis situation were raised and appropriately addressed by the researchers. The researchers noted that the study complied with the 1992 guidelines

for the handling of adult and child victims of alleged or suspected abuse or neglect as set forth by the Joint Commission on Accreditation of Healthcare Organizations (Accreditation Manual for Hospitals, 1992). In addition, due to the emotionally charged nature of the study, the researchers occassionally encountered health care providers at the data collection site whose personal attitudes concerning the need to assess for domestic violence during pregnancy disallowed easy access to potential subjects.

Limitations and Strengths

This study is limited by its convenience sample, relatively homogenous population, and decrease in the natural distribution of ethnicity in the clinic population due to language barriers. However, homogeneity can also provide for more in-depth analysis of a specific population. Additionally, as caucasian women have often been thought to be at increased risk of abuse, we may be providing potentially valuable clinical information about this distinct population.

The researchers encountered a high level of involvement and willingness to participate from the sample subjects, and were further impressed by their honesty and forthright disclosure. Several woman actually stated that they would like to fill out the questionnaire and volunteered that they had never been previously assessed for domestic violence.

The abuse assessment questionnaire used in this study was formulated from two previously tested tools with reported validity

and reliability in detecting a history of abuse as well as abuse during the current pregnancy. These research findings are comparable to those of other studies using the aforementioned previously tested tools, and lead to the assumption that this tool has similar construct validity. However, further research using this tool is necessary to document adequate reliability and validity. Finally, the questionnaire was easily administered and required little time to complete. These are important considerations when selecting a tool for use in clinical practice.

Perhaps another limitation to this study involves the resource list on the assessment questionnaire. Thirteen titles (including "other") are provided for the participant who is asked to identify whether or not she views them as helping resources for domestic violence. As there were several women who circled yes to all thirteen resources, a concern is that by listing resources for the subject she was identifying individuals because the list was in front of her and not because she would have independently thought to list that person herself. In retrospect, asking the woman to identify whom she would contact and then providing a blank space might have provided more valuable information.

Finally, the abuse questionnaire asked whether or not the subject had tried or thought of suicide. The intent in asking this question stems from the literature which suggests that battered women have a higher rate of suicide attempts then non-battered

women during the years in which they are abused. What the researchers failed to consider was that women may have answered this question positively but that their suicide attempt may have had nothing to do with an abusive situation. Clarification of this question would be necessary for use in future research to document if risk of suicide is appreciably greater in battered women.

Implications for Practice

The 1986 Surgeon General's workshop on violence recommends that all pregnant women be routinely assessed for battering during their prenatal visits, and furthermore that those women who are experiencing battering during pregnancy be classified as high-risk. By asking an additional 2-3 questions during the woman's initial intake history, a health care provider can begin to adequately assess a woman's risk of domestic violence. Potentially this is as easy as asking:

1) Has anyone ever hit, slapped, kicked, or otherwise hurt you?

2) Since you have been pregnant, has anyone ever hit, slapped, kicked or otherwise hurt you?

If a woman resopnds positively to either of these questions, the health care provider can do a more thorough assessment including the use of body maps. Additionally, when a woman identifies herself as experiencing domestic violence it is of utmost importance to assess her safety and if necessary secure a safe environment for her. Campbell's

Danger Assessment (1986) can be useful in risk identification when concern arises. Further, it is important to note that all women may be at risk for domestic violence and therefore should be made aware of available resources. Having an updated resource list available is currently a requirement of the Joint Commision on Accreditation of Health Organizations (JCAHO).

Recommendations for Further Research

In recent years, numerous prevalence studies have been conducted highlighting domestic violence as occuring at an alarming rate. However, research concerning outcomes of abusive episodes is still in its infancy. There is a need for increasingly sophisticated measures of the physiological and psychosocial consequences of domestic violence. In addition, it would be interesting to conduct a longitudinal study whose purpose is to track abused women through prenatal and immediate as well as longterm postpartal periods. This might give practitioners valuable information about the cycle of violence as it relates to pregnancy and whether or not woman abuse is a precursor to child abuse. Finally, further research using this study's abuse assessment questionnaire would be necessary to document adequate reliability and validity of the tool.

Conclusion

This study was meant to add to the knowledge base in documenting the prevalence of battering during pregnancy and whom a woman would identify as a helping resource. The findings are

valuable as it is paramount to define the magnitude of a problem before one can hope to adequately address it. This is an important first step down the pathway of intervention. It is hoped that the information obtained in this study will afford perinatal care providers an impetus for positive change. Health care providers are in an ideal position to intervene at the primary, secondary, and tertiary levels. Mutual recognition of the problem between health care provider and patient is necessary before positive change can occur. The future health of women and their children depends on it.

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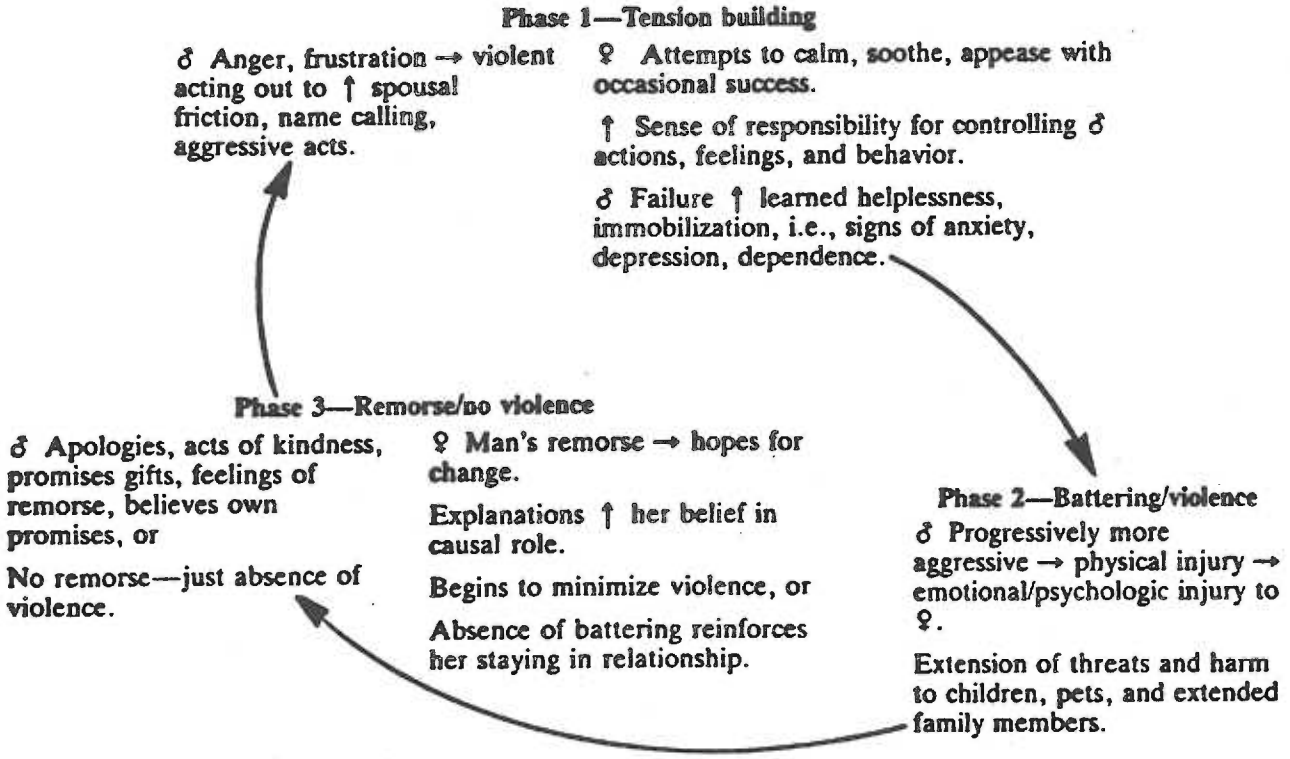
Appendix A

Conceptualization of Walker's Cyclic Theory of Violence



[Helton, A. S. & Snodgrass, F. G. (1987). Battering during pregnancy: Intervention strategies. Birth, 14(3), p.144.]

Appendix B

Abuse Assessment Questionnaire

Please circle **Yes** or **No** for each question:

1) **Within the last year** have you been hit, slapped, kicked, or otherwise physically hurt by someone? **Yes** **No**

If No, please skip to question #11.

If Yes, by whom:

Husband	**Yes**	**No**	Ex-husband	**Yes**	**No**
Boyfriend	**Yes**	**No**	Ex-boyfriend	**Yes**	**No**
Stranger	**Yes**	**No**	Other _____		

Within the last year, how many times have you been hurt? _____

2) Are you currently in a relationship with someone who has hurt you? **Yes** **No**

If No, please skip to question #8.

3) Does he still threaten to hurt you? **Yes** **No**

4) Has the physical violence increased in **frequency** over the past year? **Yes** **No**

5) Has the physical violence increased in **severity** over the past year and/or has a weapon or threat with a weapon been used? **Yes** **No**

6) Has he ever forced you into sex when you did not wish to do so? **Yes** **No**

7) Is he violently and consistently jealous of you? (For instance, does he say "If I can't have you, no one can?"). **Yes** **No**

8) **Since you have been pregnant**, have you been hit, slapped, kicked or otherwise physically hurt by someone? **Yes** **No**

If No, please skip to question #9.

If Yes, by whom:

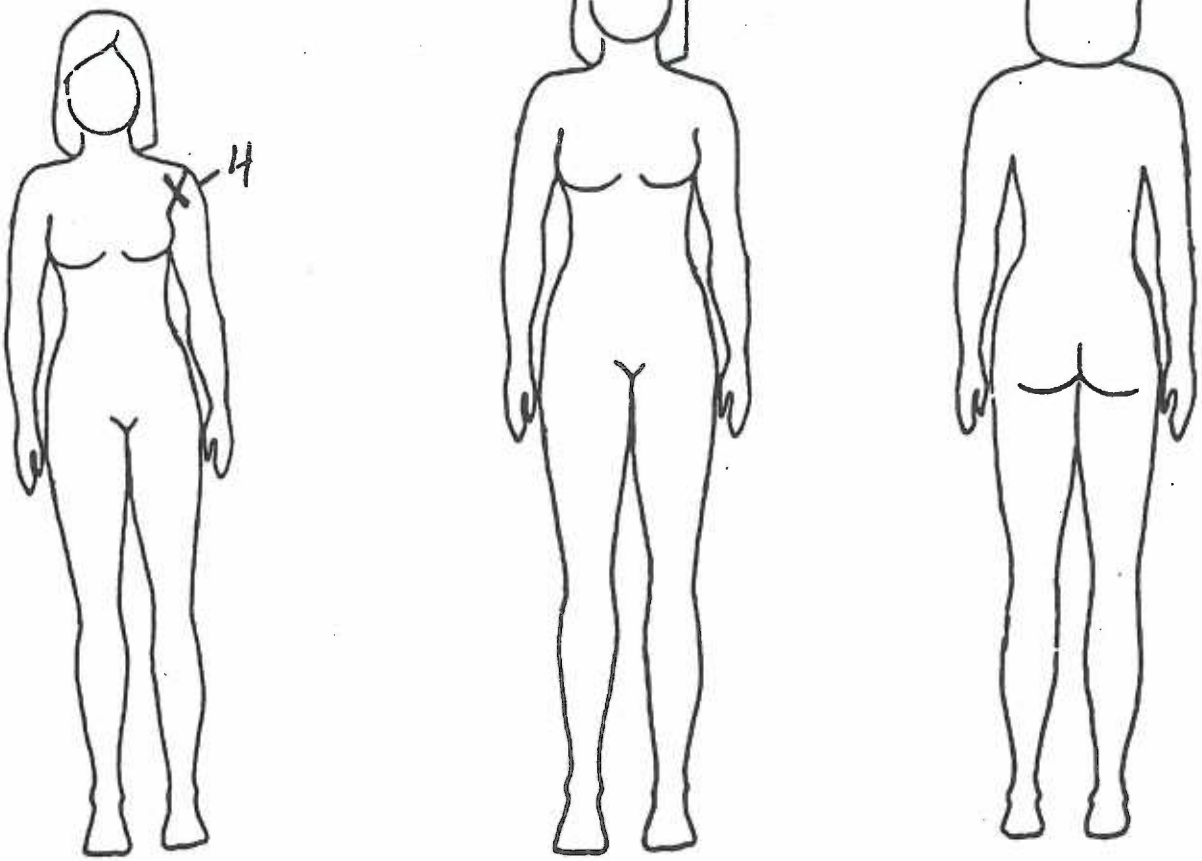
Husband	**Yes**	**No**	Ex-husband	**Yes**	**No**
Boyfriend	**Yes**	**No**	Ex-boyfriend	**Yes**	**No**
Stranger	**Yes**	**No**	Other _____		

Since you have been pregnant, how many times have you been hurt? _____

Has the abuse increased since you've been pregnant? **Yes** **No**

9) **If you have been physically abused in the last year**, remembering the **last time** he hurt you, mark the area of threat or injury on the picture of the body with an **X**. (Use more than one **X** if you were hurt in several areas).

Example:



Please score the seriousness of this incident on the body picture above using the scale below: **(See example)**

1 - threats of abuse including use of a weapon
2 - slapping, pushing; no injuries and/or lasting pain
3 - punching, kicking, bruises, cuts and/or continuing pain
4 - beating up, severe contusions, burns, broken bones
5 - severe head injury, internal injury, permanent injury
6 - use of weapon; wound from weapon

(Use the highest number that applies)

10) Have you ever threatened or tried suicide? **Yes** **No**

11) If you were abused, or worried about abuse, whom would you call?

Mother	**Yes**	**No**	Father	**Yes**	**No**
Sister	**Yes**	**No**	Brother	**Yes**	**No**
Aunt	**Yes**	**No**	Uncle	**Yes**	**No**
Grandparent	**Yes**	**No**	Male friend	**Yes**	**No**
Female friend	**Yes**	**No**	Doctor	**Yes**	**No**
Midwife	**Yes**	**No**	Clergyman	**Yes**	**No**

Other _____

Please complete the following statements and questions.

12) **My age is** _____ years.

13) **My race is:** ☐ Hispanic ☐ American Indian ☐ White

☐ Asian ☐ Black ☐ Pacific Islander ☐ Other _____

14) **I am:** ☐ single ☐ married ☐ widowed

☐ divorced ☐ separated ☐ living with a partner

15) **If you are in a relationship,** how long have you been in it? _____

16) **How many years of school have you completed?** _____

17) **How many weeks pregnant are you?** _____

Thank you.

Appendix C

Cover Letter

We would appreciate your participation in completing the attatched questionnaire about domestic violence. It asks 17 questions and should take you about 15 minutes to complete By doing so you are helping to promote a better understanding of domestic violence and how battering can affect a woman's health.

Battered women are defined as women who have suffered one or more episodes of battery from their male partner or ex-partner. Battery includes verbal and emotional abuse, slapping, kicking, punching, shoving, torture, and sexual assault.

With this definition in mind. We are asking if you would simply read and respond to the following questions. Please respond as honestly as you can. We realize that the questions asked are highly personal. We are not asking for your name. Your answers will remain totally confidential.

Participation in answering this questionnaire is totally voluntary and you are under no obligation to do so. However, we consider any information that you share on this topic to be very valuable. Completion of the questionnaire implies informed consent.

Thank you for your consideration.

Sincerely,

Karen J. Turcotte, RN, BSN
[redacted]
Courtney L. Hills, RN, BSN
[redacted]
Sharon Hinz, RNC, BSN
[redacted]

Appendix D

Domestic Violence Resource Card

GREATER PORTLAND AREA DOMESTIC VIOLENCE REFERRALS

Compiled by:

Domestic Violence Intervention Team October - 1992
Oregon Health Sciences University
Hospital and Clinics
3181 S.W. Sam Jackson Park Road
Portland, OR 97201 (503) 494-7207

(Printing courtesy of OHSU Patient Advocate's Office)

24-HOUR A DAY CRISIS AND REFERRAL SERVICES

Portland Women's Crisis Line	235-5333
Metro Crisis Line	223-6161
Parent's Anonymous	238-8818
Elder Abuse Hotline	248-3646

TRI-COUNTY CHILD ABUSE HOTLINE NUMBERS

Multnomah County (24 hr/day)	238-7555
Clackamas County (M-F, 9-5)	653-3140
Washington County (M-F, 9-5)	648-8951

DOMESTIC VIOLENCE LEGAL ADVOCACY/INFORMATION

Multnomah County Court Advocates (M-F, 9-5)	248-3873
Washington County Court Advocates (M-F, 9-5)	640-3570
Clackamas County Court Advocates (24 hr/day)	655-8616

RESTRAINING ORDER INFORMATION

Multnomah County Courthouse	248-3943
Legal Aid/Family Law Center	226-7991
Multnomah County Sheriff's Office	255-3600

HELP FOR MEN WHO ABUSE

Men's Resource Center	235-3433
William Temple House	636-5752
Raphael House	222-6222

SEXUAL ASSAULT AND INCEST SURVIVOR SERVICES

Echo's Network (incest survivors)	235-3870

EMERGENCY LODGING FOR BATTERED WOMEN

MULTNOMAH COUNTY SHELTERS

Bradley-Angle House**	281-2442
Raphael House**	222-6222
West Women's Shelter	224-7718

MULTNOMAH COUNTY SAFE HOME NETWORKS

Portland Women's Crisis Line**	235-5333
YMCA Women's Resource Center	223-6281

NEIGHBORING COUNTY SHELTERS

Henderson House (Yamhill County)	472-1503
Helping Hands (Hood River County)	386-6803
Women's Shelter (Washington County)	640-1171
Clackamas Women's Services (Clackamas County)	654-2288
Columbia County Women's Resource Center	397-6161
Midvalley Women's Crisis Service (Marion County)	399-7722
YMCA Support Services (Clark County)	(206) 695-0501

(** - Agencies that accept collect calls)