Domestic Abuse in Pregnancy: Results from a Phone Survey in Northern Israel

Menachem Fisher MD[1], Dalit Yassour-Borochowitz PhD[2] and Efrat Neter PhD[3]

[1]Israel Society of Obstetrics and Gynecology in the Community and [2]Department of Sociology, Emek Yezreel College, Israel
[3]Department of Behavioral Sciences, Ruppin College, Sharon, Israel

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Abstract

Background: Domestic violence is considered a major risk factor in pregnancy.

Objectives: To assess the prevalence of different kinds of abuse (physical, psychological, sexual) of pregnant as compared to non-pregnant women, and to identify demographic risk factors for physical abuse that characterize the woman and her partner.

Methods: A cross-sectional survey was conducted in 270 women seeking gynecologic care at women health centers in northern Israel. Information was collected by means of a standardized questionnaire administered via phone, and addressing demographic data, interaction with the partner, and reporting of physical abuse. All information was obtained from the respondents (including information about her partner).

Results: Four abuse scores were computed: severe physical attack, minor physical attack, psychological abuse, and sexual coercion. Psychological abuse was found to be the most prevalent (24%), followed by minor and severe physical attack (17% and 8.1%, respectively), and sexual coercion (5.6%). Physical attacks related to pregnancy (directed at the abdomen) occurred in 5.4% of the pregnant women. There was no significant difference in the prevalence of the different types of abuse between pregnant and non-pregnant women. Physical attack was associated with socioeconomic status, work status, and degree of religiosity.

Conclusion: Pregnant women were at a similar risk for abuse as non-pregnant women in all abuse categories. Predictors for abuse – socioeconomic status and religiosity – were reviewed primarily in a cultural context.

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Woman battering is a pattern of psychological, economic and sexual coercion of the male towards his female partner. Battering can be seen as a set of learned, controlling behaviors and attitudes of entitlement that are culturally supported [1,2]. While domestic violence is the most common cause of non-fatal injury to women, one-third of female homicides in the western world are committed by the woman's partner [3,4].

In addition to being at a greater risk for physical injury, female homicide and unhealthy behavior of the abused woman (such as drug and alcohol abuse), the victims of domestic violence are also at risk for complications of pregnancy and childbirth [3–5], especially low birth weight [6]. Studies show that millions of women all over the world – pregnant and non-pregnant alike – are daily abused and physically attacked [3,4,7–9]. Trauma and/or accidental injury complicate 6–7% of all pregnancies, with domestic violence accounting for 22.3% of them [10]. Moreover, among women seeking abortion 39.5% were victims of domestic violence [11]. Pregnant women who have experienced violence are more likely to delay seeking prenatal care [12]. The distinction between physical assault and psychological abuse may seem too subtle to have practical implications, but in fact psychological abuse, coercive behaviors and the partner's lack of support have a grave effect on the health of women generally and especially on the outcomes of their pregnancies [1–7]. Hence, the social image of pregnancy as a time of nurturing, love and caring needs to be reexamined, as evidence suggests that abuse threatens the pregnancies of many women [3,4–7]. Abuse of pregnant women is a social and health problem that has not been adequately addressed, mainly because lack of knowledge leads to lack of detection.

The frequency and characteristics of abuse towards women in Israel are similar to those in other western countries [2,3,13]. Official estimates assess that 1 in 10 married women in Israel is a battered woman, yet only 1 in 6 seeks help from social institutions (police, health authorities, social services, etc.) [14]. Owing to the Jewish and Arab ethos that emphasizes childbirth [13], more than 95% of married women in Israel have children [14]. Consequently, pregnant women constitute a large and vulnerable group that is especially susceptible to violence. Although various social organizations in Israel have estimated the prevalence of domestic violence, to the best of our knowledge no systematic assessment has been conducted of the prevalence and demographic characteristics of abuse during pregnancy.

Findings on risk factors for domestic abuse consistently involve socioeconomic status such as income, education, and work status. It was found that the lower the family income and the lower the education (of both partners), the more prevalent the physical abuse [3,7,9,13]. Our survey therefore included sociodemographic characteristics as possible predictors for violence against women [2,9,13]. The purpose of this study was to evaluate the prevalence and types of abuse during pregnancy, and its predictors. The assumption was that information pointing at risk factors might enable medical professionals to detect the phenomenon earlier [9].

Materials and Methods

Respondents

The study group comprised 270 women, of whom 74 were pregnant. The women, whose ages ranged from 18 to 65, were recruited during a routine visit to their local women health center clinics in northern Israel. These clinics belong to the largest health maintenance organization in Israel (General Health Services/Kupat Holim Clalit). The survey was conducted following a pilot study of 30 women in two clinics.

Sample characteristics [Table 1]

Our sample, drawn from various urban and rural communities in northern Israel, is diverse. Almost half of the sample lives in cities (49.4%), 17.5% live in large Arab villages, and 27% live in small Jewish communities (kibbutz or moshav). Regarding family status, 95% of the respondents were married, with a range of 1–41 years of marriage; and 86% had shared children with their partner.

Most respondents (83%) were born in Israel, and most are Jewish (79.5% compared to 79.4% nationally). The ethnic background of the Jewish respondents is more skewed towards Sephardic descent (e.g., 41.3% of the women's mothers immigrated from Asia-Africa as compared to 20.1% from Europe or North America, whereas the national data are more evenly divided). Most respondents and their partners had a high school education (46.9% and 57.8%, respectively), and most report an average income. The majority of the women (63.1 vs. 46% nationally) work outside the home. Respondents are almost evenly divided between those who view themselves as religiously traditional (46.2%) and those who view themselves as secular (43.2%), and they report their partners as somewhat more secular (53.5%). Due to its specific characteristics, our sample does not represent the overall population of Israel.

Table 1. Demographic characteristics of the women and their partners*

Characteristic	Women	Household	Male partner
Age (yr)	35 ± 9.6		38.3 ± 9.91
Ethnic group (%)			
Jewish		79.5	
Muslim		14.2	
Other minorities		6.3	
Jewish ethnic descent (%)			
Asia-Africa	41.3		51.2
Europe-America	20.1		37.7
Israel or mixed	38.7		11.1
Level of education (%)			
Less than high school	8.3		9.6
High school	46.9		57.8
More than high school	22.8		18.7
Academic	22.0		13.9
Monthly household income (%)			
Low		15.7	
Average		48.6	
Above average		34.9	
Employment status (%)			
Working	63.1		91.6
Self-rated religiosity (%)			
Religious	10.5		8.1
Traditional	46.2		38.4
Secular	43.2		53.5
Residence (%)			
Urban		49.4	
Arab village		17.1	
Kibbutz or moshav		27.5	
Other		5.9	
Shares residence with partner (%)		95.4	
Shares children with partner (%)		86	

* Plus-minus values are means ± SD. Because of rounding off, not all percentages total 100.

Materials

The questionnaire included three sections:

- *Demographic data of the women and her partner.* Socioeconomic status was assessed by questions on education, occupation, employment outside the home, household income, and place of residence. Items on country of birth, ethnic identity, and year of immigration assessed ethnic background. Marital circumstances included marital status, duration of marriage, number of children, number of shared children, and shared residence with the partner/spouse. Pregnancy was determined by reporting on gestational week and the date of the last menstrual period. The questions regarding socioeconomic status, ethnic origin, and age were asked about both the woman and her partner.
- *Abuse.* A standard, validated questionnaire measuring the extent to which a partner engages in psychological or physical abuse towards a woman was used. The questionnaire was based on Strauss' Revised Conflict Tactics Scale (CTS2) and its shortened Hebrew version [15]. The present version of the questionnaire includes 30 statements focusing on specific acts or events perpetrated by the partner in times of conflict or disagreement. Respondents were asked to remember those times and report the frequency of acts/events. They used a five-point Likert scale, ranging from "never" to "very often." An additional two items were added, focusing on pregnancy and directed only at pregnant respondents. Pregnant respondents were asked if their partner attacked them during this present pregnancy, and whether violence during pregnancy was more/less severe or unchanged compared to otherwise.

  The following types of abuse were defined: a) Severe physical attack: eight items (burns, beating with an instrument, beating with fists, kicking, strangling, threatening or using a knife or a handgun). b) Minor physical attack: six items (pushing, shoving, throwing objects at woman, slapping, breaking/kicking/throwing an object, threatening to beat a woman or to throw an object at her). c) Severe psychological attack: six items (bothering the woman during sleep or eating; restricting her to leave the house; threatening or expressing anger at children or house pets; threatening to leave, to withhold money, to take the children, to engage in extramarital relationship; and forcing her to do things. d) Sexual coercion: two items (partner's insistence on having sex, and coercing sex). Our grouping of items follows the definitions of sub-scales in the CTS2.
- *Report of (past/present) physical attacks.* Respondents were asked: "in case you were ever abused by your partner," to indicate whether they filed a report of the event with either the police or the social services. Respondents were also asked if they were ever treated medically for injuries caused by a partner's attack, if they were ever hospitalized due to such circumstances, and when they did request medical help if they told the true circumstances of injury. Answers to all these items were phrased in a yes/no form.

Procedure

Data were collected during a 6 month period in 2000. Women who arrived at a women health center clinic were asked by their

attending physician or nurse to participate in a study on family relationships. Those who agreed were told they would be contacted by phone in the next few days. They were then asked for a phone number where they could be reached and what range of hours was convenient to them for this purpose. Thirteen percent of the women declined to participate in the study, with no common factors among them.

A woman interviewer called the respondent, thanked her for her willingness to participate in the study, and stated that there was no obligation to answer all the questions. The interviewer asked questions and filled in the participant's responses. Occasionally, the interviewer added remarks concerning her subjective impressions (i.e., woman's reluctance, husband's interference during the phone interview, etc.). The structured interview began with demographic items, proceeded to the standard abuse measure, then the report of attack items, and ended with two items referring to attack during the current pregnancy. The interview was conducted in either Hebrew or Arabic according to the woman's ethnicity and wish.

Design

This cross-sectional survey examined the prevalence of abuse as a function of pregnancy status and background variables. Abuse was measured by the CTS2. The background variables were demographics (e.g., education, employment, country of birth, etc.). Pregnancy status was recorded by self-report. An institutional review board approved the study. All respondents provided oral consent, and all were guaranteed anonymity. The use of written informed consent was avoided in order to prevent a link identifying respondents to the questionnaire administered.

Data analysis

After examining the distribution of socioeconomic and demographic variables in the sample, we computed four types of abuse scores (severe physical abuse, minor physical abuse, psychological abuse, and sexual coercion), examined their prevalence among pregnant and non-pregnant women, and conducted a comparison of abuse rates between these two groups (using chi-squared). We used crossed tabular univariate analysis to characterize the physically abused women. Lastly, variables proven to be significantly related to physical abuse in the univariate analysis – all related to socioeconomic status – were combined to form the independent variable in a logistic-regression analysis predicting physical abuse.

Results

Prevalence of abuse

The prevalence rate of abuse is the percentage of the sample who reported one or more instances of the acts in each sub-scale. We computed four scores for different types of abuse: severe physical attack, minor physical attack, psychological abuse, and sexual coercion. The data are displayed in Table 2, separately for pregnant and non-pregnant women. As can be seen, psychological abuse is the most prevalent, with 20–25% reported, followed by minor physical attack, severe physical attack, and sexual coercion (the least prevalent). There were no statistically significant differences in the rates of abuse between pregnant and non-pregnant women ($P > 0.05$).

Table 2. Types of abuse by pregnancy status

Pregnancy status	Physical abuse		Psychological abuse	Sexual coercion
	Severe	Minor		
Non-pregnant women (%) (n=196)	8.2	15.8	25.5	6.1
Pregnant women (%) (n=74)	8.1	20.3	21.6	4.1
General (%)	8.1	17	24.4	5.6

Physical attack during pregnancy

Three items in the questionnaire directly addressed attacks during pregnancy. One item, which is part of the standard CTS2 questionnaire, asks about the frequency of the partner's "hitting or kicking the abdomen" during pregnancy. All sample respondents answered the item, with 3.3% reporting such an event. The other two items were part of the items directed at pregnant women who perceived themselves as encountering violence by their partner. They were asked if their partner attacked them during the present pregnancy, and whether violence during pregnancy was more/less severe and frequent, or unchanged. Five of the 74 pregnant women responded to the first question: 4 (5.4%) reported being attacked. Seven women (9.6%) responded to the second item: five reported no change in attacks and two reported reduced attack.

Reporting physical abuse

Women were asked to address the issue of reporting violence only if they categorized themselves as physically abused in any way. They were then asked whether they had filed a report of a violent event with medical, police or social services. Only 12 women responded to these questions: 8 requested medical care, 6 filed a report with the police, and 5 requested assistance from the social services.

Demographic characteristics of attacked women [Table 3]

We attempted to characterize the physically abused women. We combined the two scales of physical attack, and characterized those who reported one or more instances of the acts in this scale.

Women were significantly more likely to be attacked if they or their partner have an elementary school education, and the rate dropped as educational attainment increased. Likewise, physical attack was significantly more prevalent in families of low income: 41% of low income women reported attack, as compared with 13.2% and 12.6% among middle income and high income women, respectively. The woman's work outside the home was unrelated to physical abuse, but the partner's unemployment was found to be significantly related: 36.4% of men who were unemployed abused their partners as compared to 14.1% among men who were employed.

Ethnicity was also related to the rate of abuse (though not significantly). Among Jewish women of Sephardic descent (based on their mother's country of birth), 22.5% were attacked compared to 13% of Ashkenazi descent. The finding is similar with regard to the

Table 3. Demographic characteristics of physically abused women and their partners (percentage of abused women)

Characteristic	Women	Household	Male partner
Ethnic group (%)			
Jewish		16.4	
Muslim		26.3	
Other minorities		10.3	
Jewish ethnic descent			
Asia-Africa	22.5		17.0
Europe-America	13.0		11.5
Israel or mixed	13.5		8.7
Level of education (%)			
Less than high school	38.1*		29.2
High school	16.0		13.8
More than high school	15.5		19.1
Academic	10.7		8.6
Monthly household income (%)**			
Low		41.0	
Average		13.2	
Above average		12.6	
Employment status (%)			
Working outside home	17.7		36.4**
Self-rated religiosity (%)			
Religious	32.1*		28.6
Traditional	17.9		17.2
Secular	13.9		13.0

* Significant differences between abused and non-abused women at a0.1 level.
** Significant differences between abused and non-abused women at a 0.05 level.

attacker: 17% of Sephardic partners physically attacked a woman compared to 11.5% of Ashkenazi partners. Physical attack was more prevalent (though not significantly) against Muslim women than Jewish women: 26.3% of Muslim women reported being attacked as compared to 16.4% among Jewish women. Minorities (a category that includes Christians, Druze and Circassians, each too few to form a category) were attacked the least. Perceived religiosity was also found to be significantly related to physical abuse, with a higher prevalence among religious women (32.1%) than among traditional or secular women (17.9% and 13.%, respectively). The finding was similar (though not significant) regarding the abuser: more religious men (28.6%) attacked their partners than either traditional or secular men (17.2 and 13% respectively).

In an attempt to predict the demographic characteristics of abused women we conducted a logistic regression. Only variables that were significantly related to physical abuse in the univariate analysis were considered. These included education, income, employment, and self-rated religiosity. As education and income are both approximations of socioeconomic status, and as religiosity was related to income in this sample, we considered combining them into one variable. The dimensionality of the four variables was analyzed using principle factor analysis with no extraction. The scree plot and the eigen values indicated that all four variables form one factor accounting for 51% of the variance. The SMCs, ranging from 0.62 to 0.86, indicated internal consistency. We then used the combined socioeconomic status variable to predict physical abuse. The logistic regression model indicated that socioeconomic status was a significant predictor of abuse: compared to low socioeconomic status women (the reference group), those at the intermediate range were less likely to be attacked (odds ratio 0.30, $P < 0.05$; 95% confidence interval 0.11–0.78), as were women of high socioeconomic status (OR ratio 0.25, $P < 0.05$; 95% CI 0.08–0.79).

Discussion

This study of 270 women recruited in women health centers in northern Israel examined the prevalence of different kinds of domestic abuse among pregnant and non-pregnant women, and the demographic correlates for physical attack against women. To the best of our knowledge, this is the first empiric study linking domestic abuse with pregnancy in Israel.

We found a higher prevalence of domestic physical violence against women (15%) than the 10% formally estimated in Israel [2,13,14,16]. We also found that the 5.4% prevalence of this type of violence towards presently pregnant women is compatible with the numbers cited in studies of other countries, namely 3–11% [4,5,10,11]. Moreover, an item (in the CTS questionnaire) that specifically focuses on pregnancy-related violence (i.e., a direct hit/kick in the stomach) was reported by 3.3% of the women in our study, which is indeed a smaller ratio than domestic violence in general [7,8,11], yet it is a grave ratio of direct, fetus-focused attack [17]. We did not find any significant differences in the prevalence of domestic abuse against pregnant women and non-pregnant women, possibly indicating that pregnancy does not change the patterns of abuse. This finding is compatible with some other studies [18].

We found the rate of psychological abuse to be very high, ranging from 20 to 25% in our sample. Not many studies included psychological abuse in their definitions of domestic violence. However, we believe that both its high frequency and its severe implications on pregnancy outcome [1,3,6,19] mandate attention. Lack of psychosocial resources, the stress and the partners' emotional and instrumental coercive behaviors increase birth complications (premature labor, low birth weight, and adverse maternal conditions) [6,19–21].

Ethnicity was found to be related to physical attack, with Arab Muslim women being at the greatest risk – one in four being abused [14,22]. This finding is compatible with other studies [13,14,23] and can be partly explained by the fact that the prevailing Islam ideology perceives women as confined to the home and not equal to the males in the family; control over women is encouraged and a woman's questioning the authority of her husband is considered a serious error (called "Fitna") [22,23]. An additional explanation may be the reluctance of the Arab Muslim population to seek intervention from the (mostly) Jewish social institutions, a fact that strengthens the family's control over its individual members, especially women [22]. We also found that the religiosity of both partners, among Jews and Muslims, was a risk factor: the more religious and traditional the couple the more physical abuse was

OR = odds ratio
CI = confidence interval

reported. Physical abuse was the lowest among secular couples. This finding may be closely associated with ethnicity: both Jewish and Muslim religious traditions emphasize rigid gender roles and male dominance, along with a demand for chastity and obedience on the part of women, and control of the family property by men. These traditions are less prevalent among secular families, and do not exist in the Israeli legal code [2,23].

Our results regarding the reporting of physical abuse may have been biased by issues of self-perception on one hand, and reluctance to turn to social institutions that may seem patriarchal and thus hostile on the other. Very few (only 12 women) responded to items on whether those who perceived themselves as physically abused reported it to any of the social services. It is a well-described phenomenon that battered women often do not perceive themselves as victims of abuse and avoid labeling themselves as such [24]. Moreover, studies report that even battered women who perceive themselves in need of help mostly avoid seeking interventions of the social institutions (such as police, health establishment, etc.). These social institutions are seen as offering "masculine solutions" that distance women from other people who are important and dependent on them (children, family, supportive neighbors, etc.) [3,24]. This background may account for the very low response to this section of the interview.

Our findings are somewhat limited by the particulars of our sample. The sample was drawn from a population that sought obstetric and gynecologic care in HMO clinics in northern Israel. The non-representative attributes of the sample that stand out are the high percentage of respondents of low income [25] and the large percentage of rural respondents (27.5% among the Jewish respondents, compared to 9.2% nationally). This may have contributed to the higher prevalence of violence that we found compared to the estimates and findings of other studies in Israel [2,14–16].

Our findings are lacking in behavioral characteristics of both women and men as risk factors. Future studies should consider additional behavioral factors such as alcohol and drug abuse. They should also include a follow-up assessment of the effect of abuse during pregnancy on birth outcomes such as abruptio placenta, premature rupture of membranes, miscarriage, low birth weight of infant, antepartum hemorrhage and postpartum depression.

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Correspondence: Dr. D. Yassour- Borochowitz, Dept. of Sociology, Emek Yezreel College, 19300, Israel.
Phone: (972-4) 642-3484
Fax: (972-4) 810-0939
email: dality@yvc.ac.il