Intimate partner violence screening and counseling in the health care setting: Perception of provider-based discussions as a strategic response to IPV

Alexa L. Swailes[a], **Erik B. Lehman**[b], **Amanda N. Perry**[b], **Jennifer S. McCall-Hosenfeld**[c]

[a]College of Medicine, Pennsylvania State University, Hershey, Pennsylvania, USA;

[b]Department of Public Health Sciences, College of Medicine, Pennsylvania State University, Hershey, Pennsylvania, USA;

[c]Department of Medicine, Penn State Milton S. Hershey Medical Center, Hershey, Pennsylvania, USA

Abstract

Intimate partner violence (IPV) affects women worldwide, and is addressable in the health care setting not only via screening, but also through provider-based counseling and referral to legal or social services, as appropriate. We conducted a study in Pennsylvania (USA) examining factors associated with receipt of IPV screening and women's perceptions of counselling discussions as a strategic response. We found that women with past-year IPV were more likely to receive screening (aOR: 2.0, 95%CI: 1.2,3.5) and to consider counseling discussions to be a strategic response to IPV exposure (aOR: 2.7, 95%CI: 1.008,7.2) than women with a more distant history of IPV. Scholars and clinicians may learn that, especially for women with a recent history of IPV, screening may provide a conduit to meaningful counseling discussions and referrals that women view as a helpful strategy in responding to IPV.

Intimate partner violence (IPV) is psychological, physical, or sexual abuse that occurs between two people in an intimate relationship (Flitcraft, Hadley, Hendricks-Matthews, McLeer, & Warshaw, 2009). IPV is highly prevalent in the United States and throughout the world, and it affects women disproportionately: up to 61% of women worldwide have experienced physical or sexual abuse, and up to 75% have experienced emotional or psychological aggression such as controlling or manipulative behaviors in their lifetimes (Garcia-Moreno, Guedes, & Knerr, 2012). IPV has a substantial impact on women's health and on the economy—the U.S. health care system incurs IPV-related costs in excess of $8.3 billion annually—with heightened use of health care services observed in response to IPV and its related physical and mental health sequelae (Campbell & Lewandowski, 1997; Rivara et al., 2007). Of note, IPV-related health complications may not abate upon cessation of abuse, with significantly increased usage of the health care system routinely observed up to 5 years after a woman leaves an abusive partner (Rivara et al., 2007).

✉**CONTACT** Alexa L. Swailes aswailes@hmc.psu.edu College of Medicine, Pennsylvania State University, 90 Hope Dr., Mailcode A210, Hershey, PA 17033, USA.

Recognition of the deleterious health effects associated with IPV has prompted international governmental and professional medical associations to recommend universal screening for IPV in the health care setting. In the United States, the first broad recommendation for universal IPV screening was issued in 1992 when the American Medical Association established guidelines for IPV screening, stating that "domestic violence and its medical and psychiatric sequelae are sufficiently prevalent to justify routine screening of all women patients" (Flitcraft et al., 2009, p. 41). This recommendation was echoed by the American College of Obstetricians and Gynecologists (ACOG), and most recently at a federal level by the United States Preventive Services Task Force (USPSTF) in 2013 (ACOG, 2012; Moyer, 2013).

Because a single-payer health care system is not established in the United States, insurance coverage of health services is often inconsistent, and it has recently become subject to increased federal regulation. In 2010, via the federal passage of the Patient Protection and Affordable Care Act (PPACA), mandatory coverage of preventive health services by public health insurance providers was established, at no cost to patients (American Society for Public Administration [ASPA], 2011). In 2011, the definition of "preventive health services" was expanded to include IPV screening and counseling subsequent to the publication of *Clinical Preventive Services for Women: Closing the Gaps* by the Institute of Medicine (IOM, 2011). As part of comprehensive care, authors of these recommendations and coverage guidelines encourage both universal screening for IPV, and provider-based counseling upon disclosure of abuse, to educate women about adverse health effects of IPV, promote safety planning, and provide referrals to mental health specialists or community-based domestic violence services, as appropriate (Futures Without Violence, 2002).

Despite cultural differences in provider–patient interactions worldwide, women report deriving benefit from universal IPV screening in the health care setting, regardless of previous exposure to IPV (Bair-Merritt et al., 2014). In a study conducted in Lebanon, researchers found that among non-IPV-exposed women, screening in the health care setting establishes community sentiment opposing violence against women (Usta, Antoun, Ambuel, & Khawaja, 2012). In studies performed in both Hong Kong and the United States, researchers have found that, among women exposed to IPV, counseling, intervention, or both may lead to decreased adverse health effects, such as less frequent depressive symptoms (Tiwari et al., 2005), improved pregnancy outcomes (Kiely, El-Mohandes, El-Khorazaty, Blake, & Gantz, 2010), and improved health-related quality of life (Tiwari et al., 2005). Provider-based intervention may also be associated with a concomitant increase in use of other strategic responses to IPV, including safer sexual practices (Melendez, Hoffman, Exner, Leu, & Ehrhardt, 2003), safety planning (Gillum, Sun, & Woods, 2009), and increased usage of domestic violence services (Coker et al., 2012). Thus, health care providers are positioned to adopt an influential role in the physical and mental well-being of their IPV-exposed patients and establish a sense of solidarity against IPV in the general public.

Discussing IPV with health care providers may constitute a response that currently- or previously-exposed women use to address IPV and its health-related complications. Historically, women have reported that formal response strategies, such as discussing IPV

with health care providers or pursuing legal aid, are helpful in dealing with abuse (Anderson, Renner, & Bloom, 2014). Receipt of provider-based IPV screening and counseling is correlated with increased use of other strategies highly rated for helpfulness, including safety planning (Bair-Merritt et al., 2014; Gillum et al., 2009) and is associated with improved physical functioning and emotional health (Tiwari et al., 2005). Of greater importance, however, is that women who perceive that their resources are supportive and offer reliable information and advice tend to be more successful in ending abusive relationships (Bosch & Schumm, 2004). Thus, understanding the factors associated with pursuit and perceived usefulness of health care provider-based counseling in response to IPV could provide insight into increasing uptake of this critical clinical preventive service.

Despite the prevalence of IPV and its deleterious effects on exposed women, and despite current and long-standing national and international guidelines in support of screening and counseling for IPV in health care settings, IPV screening rates remain low in the United States and worldwide. Prior to the USPSTF and IOM recommendations, only 20%–40% of IPV-exposed women and 10%–30% of non-IPV-exposed women received screening or counseling in the United States within the past year (McCall-Hosenfeld, Chuang, & Weisman, 2013; McCloskey et al., 2005). IPV screening is critical to identifying and intervening in the care of women who have experienced past or ongoing IPV, and health care provider intervention has resulted in improved health-related outcomes. Few investigators to date, however, have examined the characteristics of women who receive screening and counseling from their healthcare providers. Moreover, little is known about the characteristics of women who perceive health care provider-based counseling as a strategic response to IPV, compared with those who do not share this perception.

We examine the demographic, health-related, and IPV exposure characteristics associated with receipt of provider-based screening and counseling. We likewise examine the factors associated with women's perceptions of IPV-related discussions with their health care providers as a potentially helpful strategic response to IPV. We hypothesize that women with more recent IPV exposure, psychiatric diagnoses, and resource-limiting characteristics such as lower educational attainment and lower income status are more likely to receive provider-based screening or counseling, and are similarly more likely to consider provider-based counseling as a strategic response to IPV.

Materials and methods

We identified participants (*N*D 310) through two main venues—the Penn State Ambulatory Research Network (PSARN) and domestic violence shelters serving rural and nonrural locations in Pennsylvania. Recruitment and data collection took place from May 2013 to January 2014.

First, we identified all eligible women ages 18–64 with a confirmed outpatient visit at a primary care clinic served by PSARN within the 12 months preceding enrollment (*N* D 24,338). From this list, we constructed a rurality-stratified random subsample of 2,500 women, oversampling for rural residence. These women received a survey addressing overall health status, health habits, health care access, and other health risks including

IPV exposure, as measured by a modified Humiliation-Afraid-Rape-Kick (HARK) screening tool, which is a validated English-language instrument for assessing IPV exposure in health care settings (Sohal, Eldridge, & Feder, 2007). We modified the HARK instrument to detect both 12-month and lifetime IPV exposure. Of the 1,191 women who responded to the eligibility screening survey, those who reported at least one lifetime instance of IPV, indicated by any positive response to the modified HARK tool ($N = 500$), were invited to participate in a larger survey (described below), of whom 271 consented to participate and completed the baseline survey.

We augmented this sample by recruitment from domestic violence shelters. We placed recruitment posters in domestic violence shelters serving both rural and nonrural locations in Pennsylvania, briefly describing the study and inviting women to contact the investigators to complete an eligibility screening survey. Women who responded to recruitment materials placed in domestic violence shelters completed the screening survey ($N = 73$), and were deemed eligible if they were ages 18–64 and reported experiencing at least one lifetime instance of IPV ($N = 60$).

We invited eligible women recruited from both PSARN and from domestic violence shelters, with at least one episode of lifetime IPV, as defined by the HARK tool, to complete a longer survey, including information about demographics, health history and status, mental health, IPV exposure characteristics, and strategic responses to IPV. Our final sample was comprised of 310 women, with 39 recruited from shelters and 271 recruited from PSARN. The sample for this analysis includes only women who reported that they had a health care appointment in the past year and indicated that they had talked to a health care provider about relationship trouble, domestic violence, or their safety at home, for a final sample of 305 women.

Participants were given the option of completing the survey online ($N = 223$), in paper format ($N D 67$), or over the phone ($N = 14$). The format of survey completion of one participant was unidentified. Study data were collected and managed using REDCap electronic data capture tools hosted at the Pennsylvania State University. REDCap (Research Electronic Data Capture) is a secure, web-based application designed to support data capture for research studies (Harris et al., 2009). If the survey was completed online, participants entered data directly into the REDCap application. If completed in paper format, investigators entered survey data into the REDCap system with subsequent data verification by another member of the research team. Telephone interviews were conducted by trained interviewers at the Survey Research Center at the Pennsylvania State University, and responses from these interviews were entered directly into REDCap by the interviewer at the time of interview. Participants were compensated with a $25 gift card to their preferred shopping establishment. All study documents and protocols were reviewed and approved by the Pennsylvania State University Institutional Review Board. Additionally, a Certificate of Confidentiality was obtained from the National Institutes of Mental Health prior to conducting this research.

Independent variables

We measured IPV exposure using a modified version of the HARK screening tool (Sohal, Eldridge, & Feder, 2007). The original HARK tool uses four brief questions to detect emotional, physical, and sexual abuse perpetrated by an intimate partner within the past year. We modified the HARK tool to detect lifetime IPV, and, further, to determine the recency of IPV exposure after any response indicating that a woman had experienced any type of abuse in her lifetime. We then constructed a binary variable from the responses to the HARK tool, to indicate whether the respondent experienced IPV within the past year or during her lifetime (but not within the past year).

Dependent variables

We considered women to have received screening or counseling from a health care provider if they indicated that within the past year they either "talked to a doctor or nurse about relationship trouble" (Goodman, Dutton, Weinfurt, & Cook, 2003) or a "doctor, nurse, or other healthcare professional asked [them] or talked to [them] about domestic violence or about concerns about safety or violence in [their] home" (McCloskey et al., 2005). We asked women to consider counseling conversations with a health care provider as a strategic response to IPV if they endorsed a line-item on the Intimate Partner Violence Strategies Index (Goodman et al., 2003) stating that they "talked to a doctor or nurse about relationship trouble" because of "a problem with a partner or ex-partner within the past year."

Control variables

To determine which covariates to include in our analysis, we performed a literature review regarding factors typically associated with heightened receipt of IPV screening, and we selected additional demographic variables for examination, including age, race, education level, near-poverty status, health insurance status, and psychiatric diagnosis. We found that low total household income (McCloskey et al., 2005), as well as self-identification as Caucasian and presence of a psychiatric diagnosis, are significantly associated with increased IPV screening and documentation rates (Coker, Bethea, Smith, Fadden, & Brandt, 2002). Moreover, we found that low educational attainment, as well as lack of private insurance—both highly correlated with poverty–may preclude women from seeking more specialized resources (Jewkes, 2002).

We adapted questions regarding age, race, education level, and income from standardized surveys such as the Central Pennsylvania Women's Health Study (Weisman et al., 2006) and the 1998 Commonwealth Fund Survey of Women's Health (Sandman, Schoen, Des Roches, & Makonnen, 1998). We assessed education level by asking participants to select "the last grade or class completed in school" from answer choices of "less than high school," "high school graduate," "some college after high school," or "college graduate or greater," and dichotomizing results at the level of "college graduate or greater." We constructed a variable determining near-poverty status by comparing the ratio of income to household size to poverty guidelines established by the U.S. Department of Health and Human Services for 2013 (U.S. Department of Health and Human Services, 2013). We assessed psychiatric diagnosis using the M-3 checklist—a validated screening tool for depression, anxiety, bipolar, and post-traumatic stress disorders for use in primary care (Gaynes et al., 2010).

We determined insurance status by a two-tiered question, first asking the participant if she was currently "covered by any form of health insurance or a health plan," and, if so, which type of insurance she carried from a list of options containing "private insurance through an employer," "private insurance you purchased directly from an insurance company such as an individual policy," "Medicaid, the government program that helps pay medical bills for people with low incomes," and "some other government medical program such as Medicare, CHAMPUS, or the VA."As this sample was highly privately insured (77%), we chose private insurance status versus other insurance status as a control variable due to the effect it may have on prevalence of screening and counseling in the post-PPACA era.

Statistical analysis

We performed all statistical analyses using SAS version 9.3 (2012; SAS Institute Inc., Cary, NC, USA.). For univariate analyses, we used descriptive statistics including frequencies and percentages or means and standard deviations. We examined associations between independent variables (demographic information, IPV exposure, and psychiatric diagnosis) and receipt of screening/counseling or the use of conversations with health care with bivariate analyses using logistic regression. We used odds ratios with 95% confidence limits to quantify the magnitude, direction, and significance of the associations. Furthermore, we used multivariable logistic regression to examine the odds of receipt of screening or counseling and the odds of using provider-based counseling as a strategic response by IPV exposure, controlling for age, race, education level, poverty, and psychiatric diagnosis. We assessed both models for multicollinearity and fit using variance inflation factor (VIF) statistics and the Hosmer and Lemeshow Goodness-of-Fit test.

Results

As shown in Table 1, the average age of participants ($N = 305$) was 43.4 years ($SD +/-$ 12.2), with 90% of women self-identifying as White, non-Hispanic, and 43% of women reporting their highest level of educational attainment as college graduate or above. Of note, 77.3% of women were privately insured, with 22.7% either publicly insured or uninsured. Within the past year, 34.8% of women reported experiencing some form of IPV.

Of the 305 women with a lifetime history of IPV exposure and a health care appointment in the past year, 35.7% ($N = 109$) reported receiving screening or counseling for IPV from a health care professional (Table 1). In bivariate analyses, we found that factors significantly associated with increased receipt of screening or counseling for IPV were lack of insurance or nonprivate insurance coverage (49.3% vs. 31.9%, $p = .0089$), psychiatric diagnosis (44.0% vs. 31.1%, $p = .0247$), and past-year IPV exposure (47.2% vs. 29.7%, $p < .0026$). Additionally, receiving screening or counseling showed no correlation with method of survey completion (paper survey: 44.8%, online survey: 32.3%, telephone: 50%, $p = .095$).

Of the 109 women who received IPV screening or counseling by a health care provider in the past year, 36.7% considered it to be a strategic response to IPV exposure based on their indication that they "talked to a doctor or nurse about relationship trouble" in the past year due to "a problem with a partner or ex-partner" (Goodman et al., 2003; see Table 2). In

bivariate analyses, we found that factors significantly associated with use of provider-based IPV counseling as a strategic response to IPV included lower educational attainment (48.5% "less than college graduate" vs. 18.6% "college graduate or greater," $p < .0022$), low income level (57.1% vs. 32.9%, $p < .0463$), lack of insurance or nonprivate insurance coverage (52.9% vs. 29.3%, D .0196), psychiatric diagnosis (52.1% vs. 24.6%, $p < .0037$), and past-year IPV exposure (52.0% vs. 23.7%, $p < .0028$).

In multivariable analyses (Table 3) controlling for age, race, education, income level, insurance status, and psychiatric diagnosis, we found that women who had past-year IPV exposure also had increased odds of receiving screening or counseling (aOR: 2.0, 95% CI: 1.2, 3.5) compared with women with a more remote history of IPV exposure. For women receiving IPV screening or counseling in the past year, past-year IPV exposure (aOR: 2.7, 95% CI: 1.01, 7.2) was associated with use of screening or counseling discussions with a health care provider as a strategic response to IPV exposure. Of note, none of the other factors we hypothesized to affect IPV screening rates or to affect perception of provider-based IPV counseling as a strategic response (psychiatric diagnoses, lower educational attainment, and lower income status) were found to be significant in multivariable analysis.

Discussion

In the current changing health care climate in the United States, emphasis is being placed on primary preventive practices, including care for complex biopsychosocial issues such as IPV (de Boinville, 2013). The Patient Protection and Affordable Care Act (PPACA) of 2010 established screening for IPV as a key women's health preventive service and deemed it ineligible for cost sharing by insurance providers (ASPA, 2011). Shortly thereafter, in 2013, the USPSTF's recommendation that all women of childbearing age be screened for IPV in the health care setting bolstered the emphasis that is being placed on identifying IPV in health care settings, in hopes of reducing the prevalence of IPV and its health sequelae (Moyer, 2013). Despite overwhelming support for increased IPV screening measures, we found that screening rates remained low at 36%, even though all women in our research population experienced IPV within their lifetimes.

It should be noted that our survey was administered approximately 6 months into 2013. As such, not all women would have consulted with a health care provider who had knowledge of the most recent USPSTF recommendation. Nevertheless, the provisions of the Patient Protection and Affordable Care Act (PPACA) passed in 2011 to cover preventive services for women on a non-cost-sharing basis for private insurance plans could reasonably be expected to be associated with increased rates of screening and counseling among the privately insured population (ASPA, 2011). We found that rates of IPV screening and counseling remain inadequate, however, even among privately insured women, which we interpret to signify that barriers to IPV screening remain that are not financial in nature (Jewkes, 2002).

In reviewing previous research, we found that clinicians may selectively screen women who they perceive to be at higher risk for IPV due to sociodemographic or health factors, yet they may fail to identify the majority of those exposed (Campbell & Lewandowski, 1997; Coker et al., 2002). Indeed, in bivariate analysis, we observed that women who are

poorer, less educated, and uninsured or lacking private insurance are screened for IPV with greater frequency than women who are more wealthy, more educated, or have private insurance. This may be due to health care providers' perceptions that these women represent a higher risk of experiencing IPV, or it may indicate that women of a higher socioeconomic status may avoid seeking IPV-related services. These data must be interpreted with caution, however, because, in multivariable analysis, we found that the only independent association that exists between the sociodemographic factors we analyzed was the association between past-year IPV and screening and counseling. Thus, we suggest that clinicians may indeed be perceptive of recent exposure to IPV, but they may be less sensitive in the detection of women with a more distant history of abuse. Health complications related to IPV exposure —mental health issues, obesity, and adverse health behaviors such as substance abuse–may not abate once the abusive stimulus is removed, and use of the health care system has been shown to remain significantly elevated among IPV-exposed individuals, for at least 5 years after termination of an abusive relationship (Rivara et al., 2007), making recognition of even remote IPV exposure a highly relevant issue to clinical practice.

To our knowledge, we have developed the first study with the goal of evaluating the characteristics of women who consider provider-based counseling discussions as a strategic response to IPV exposure, and we have found that women who have been recently exposed to IPV are more likely to have discussions regarding IPV with their health care providers. We postulate that recently exposed women may be more likely to view discussions with their health care providers regarding IPV as a strategic response due to acute severity of abuse resulting in health complications, or due to the perception that health care providers offer entrée into other needed services. We analyzed data and thus believe wholeheartedly in the importance of early detection of IPV, and we encourage providers to engage in meaningful discussions about IPV with all of their patients.

Our data have several limitations to consider. The small sample size in this study prevented us from performing a stratified analysis of screening and counseling with respect to the type of IPV (physical vs. nonphysical), which may inform rates of screening and disclosure (Coker et al., 2002). In addition, the proportion of White, non-Hispanic individuals is far greater than the national mean; thus, our data—while representative of central Pennsylvania —may not extrapolate well to locations in which the population is more racially and ethnically diverse. Furthermore, we recruited participants from shelters and health care clinics, signifying that they may be more inclined toward help-seeking behaviors than other women who may be experiencing similar forms of abuse.

Our study also has several important strengths, including being the first to examine characteristics associated with women's perceptions of IPV screening and counseling discussions as a strategic response to IPV exposure. Further research should focus on elucidating the content and context of screening and counseling discussions in the health care setting, and examine screening rates as the health care system adapts further to the PPACA and the USPSTF recommendations.

Conclusions

IPV is a devastating and widespread issue facing women today for which identification and intervention are possible. Health care providers are uniquely positioned to partner with women as they navigate the social, psychological, and health sequelae of IPV exposure. With a greater evidence base supporting IPV assessment and counseling in the health care setting, we further the recommendation for universal screening of all women of reproductive age for IPV, and we advocate strongly for counseling and subsequent services following a disclosure, as appropriate to each patient's situation.

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Table 1.

Bivariate analyses: Receipt of IPV screening or counseling.

	Total (N = 305)	Received IPV screening/counseling (N = 109, 35.7%)	Did not received IPV screening/ counseling (N = 196, 64.3%)	p value
Age	43.4 ± 12.2	42.0 ± 11.9	44.2 ± 12.3	.1357
Race				
White, Non-Hispanic	272 (90.1)	96 (35.3)	176 (64.7)	.8806
Other	30 (9.9)	11 (36.7)	19 (63.3)	
Education level				
Less than college graduate	172 (56.6)	66 (38.4)	106 (61.6)	.2967
College graduate	132 (43.4)	43 (32.6)	89 (67.4)	
Near-poverty				
<125% of poverty guideline	44 (15.4)	21 (47.7)	23 (52.3)	.0561
>125% of poverty guideline	242 (84.6)	79 (32.6)	163 (67.4)	
Insurance status				
Privately insured	235 (77.3)	75 (31.9)	160 (68.1)	.0089 [*]
Public insurance or uninsured	69 (22.7)	34 (49.3)	35 (50.7)	
Psychiatric diagnosis				
Yes	109 (35.7)	48 (44.0)	61 (56.0)	.0247 [*]
No	196 (64.3)	61 (31.1)	135 (68.9)	
IPV exposure				
Past-year IPV	106 (34.8)	50 (47.2)	56 (52.8)	.0026 [*]
Lifetime IPV	199 (65.3)	59 (29.7)	140 (70.3)	

[*] $p < .05$

Table 2.

Bivariate analyses: Use of IPV screening or counseling as a strategic response.

	Total (*N* = 109)	Used counseling discussion as strategic response (*N* = 40, 36.7%)	Did not use counseling discussion as strategic response (*N* = 69, 63.3%)	*p* value
Age	42.0 ± 11.9	44.5 ± 10.8	40.6 ± 12.3	.1097
Race				
White, non-Hispanic	96 (89.7)	34 (35.4)	62 (64.6)	.7427
Other	11 (10.3)	5 (45.5)	6 (54.5)	
Education level				
Less than college graduate	66 (60.5)	32 (48.5)	34 (51.5)	.0022 [*]
College graduate	43 (39.5)	8 (18.6)	35 (81.4)	
Near-poverty				
<125% of poverty guideline	21 (21.0)	12 (57.1)	9 (42.9)	.0463 [*]
>125% of poverty guideline	79 (79.0)	26 (32.9)	53 (67.1)	
Insurance status				
Privately insured	75 (68.8)	22 (29.3)	53 (70.7)	.0196 [*]
Public insurance or uninsured	34 (31.2)	18 (52.9)	16 (47.1)	
Psychiatric diagnosis				
Yes	48 (44.0)	25 (52.1)	23 (47.9)	.0037 [*]
No	61 (56.0)	15 (24.6)	46 (75.4)	
IPV exposure				
Past-year IPV	50 (45.9)	26 (52.0)	24 (48.0)	.0028 [*]
Lifetime IPV	59 (54.1)	14 (23.7)	45 (76.3)	

[*]
p < .05

Table 3.

Multivariable analyses: Use of counseling discussions as strategic response.

	Receipt of IPV screening or counseling (*N* = 281)			Use of screening/counseling discussions as strategic response (*N* = 98)		
	AOR	**95% CI**		**AOR**	**95% CI**	
Past-year IPV exposure	2.037	1.198	3.464	2.695	1.008	7.205
Age	0.933	0.837	1.040	1.239	0.995	1.543
White, Non-Hispanic	0.979	0.414	2.319	0.746	0.171	3.259
College graduate	0.863	0.507	1.471	0.446	0.158	1.259
Near-poverty	1.105	0.478	2.555	1.913	0.394	9.300
Privately insured	0.624	0.298	1.307	0.846	0.188	3.812
Psychiatric diagnosis	1.391	0.811	2.385	2.153	0.835	5.552

Note: Multivariable analyses restricted to records of women who had complete responses to all variables.