Predictors of Physicians' Responses to Woman Abuse:

The Role of Gender, Background, and Brief Training

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Objective: To assess the relationship between gender, background, and brief training and physicians' detection of and treatment for woman abuse.

Design: Quasi-experimental and correlational designs, plus control for background factors.

Setting: Two residency training programs: general internal medicine and family practice.

Participants: Thirty-five participants were residents and four were faculty members; 17 were trained and 22 were untrained physicians; 20 were women and 19 were men.

Measures: Immediately after an encounter with each physician, a standardized patient rated speed of detection, history taking, planning, and focus on psychosocial issues.

Results: Women tended to detect the abuse earlier and take a more thorough history. Trained and untrained groups did not differ on any outcome variable. Prior professional training and having personally known a victim were positively associated with outcome, especially among men.

Conclusions: Referrals might best be made to women counselor/advocates. More extensive training of all personnel may be needed than that provided in this study.

Key words: women; abuse; domestic violence; gender effect; physicians.
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THE ABUSE OF WOMEN by their intimate partners continues to be a widespread and serious problem, hidden until recently behind the closed doors of family privacy.[1] Physicians are in a unique position to detect abuse and offer help because of the many victims who go to emergency rooms and primary care centers.[2,3] However, physicians are often criticized for not detecting the abuse or for giving inappropriate care. They may lack training or not have adequate time, but attitudes may also play a role. Some physicians fear opening a "Pandora's box" of complex psychosocial issues and intruding into the most private areas of family life.[4] Training in the topic of domestic violence is increasing, but very little research has been conducted on its impact. One study of emergency department physicians found that detection rates rose after brief training, but treatment and referral practices did not change.[5] In another study, family practice residents trained to identify and treat battered women gave more complete treatment plans in an encounter with a "standardized pa-

tient" than did those who chose not to be trained.[6] One hospital offering multimethod training to its health care professionals experienced an increase in abuse referrals to the social work department and more sympathetic attitudes among those trained.[7]

This study reports the ability of physicians to detect and respond to woman abuse. Gender of the physician was studied as a factor because prior research showed more sympathetic attitudes among women providers.[8] At a recent meeting of the Society of General Internal Medicine, women showed much more interest in the topic.[9] The impact of brief training and the possible influence of prior professional and personal exposure to the problem were also investigated. Because prior studies of brief training did not control for self-selection into the training, we used a quasi-experimental design to control for these and other effects.

METHOD

Sample and Design

Two sites cooperated with the study: a general internal medicine clinic and a family practice clinic. Both are teaching clinics of a medical school. At the general medicine clinic, 20 residents and four faculty members participated; ten were women and 14 were men. At the family practice clinic, 15 residents participated; ten were women and five were men.

Among residents at the general medicine clinic who completed an encounter with a standardized domestic abuse patient, eight were residents who had our domestic violence training and 12 were untrained residents (78% participation rate). Two trained and two untrained faculty members also completed the encounters. The residents were among 26 residents on one of four clinic teams. Two teams had been randomly assigned to receive training immediately and the other two, matched by years of residency and gender, had been assigned to a waiting-list control condition. At the family practice clinic, seven trained residents and eight untrained ones agreed to participate in the study (65% participation rate). A naturalistic experiment occurred at this site because those who did not attend training had been randomly placed in outlying clinics as part of a routine rotation. The trained and untrained residents across both sites did not differ significantly in age or years of residency. The trained and untrained participants (including faculty) did not differ in amount of prior professional exposure or number of victims

TABLE 1

Ratings of Men ($n = 19$) and Women ($n = 20$) Physicians

	Without Control Variables			With Control Variables*		
	Men — Mean	Women — Mean	F	Men — Mean	Women — Mean	F
When asked about abuse†	2.42	1.65	7.52‡	2.33	1.74	5.94§
Focus on psychosocial problems (% of time)	23.63%	32.25%	0.89	24.07%	31.38%	1.21
History taking¶	2.88	4.18	6.38§	2.98	4.09	4.46§
Help make plan/refer‖	2.52	3.90	5.65§	2.61	3.82	3.68§

*Control variables were: brief training, number of victims known, prior professional exposure, training site, and years of residency.
†1 = first third of interview; 2 = middle third; and 3 = last third.
‡$p < 0.01$, one-tailed.
§$p < 0.05$, one-tailed.
¶Nine-item scale.
‖Five-item scale.

known, and were about equally divided between men and women (53% vs 47%).

Training Procedures

Training covered the scope and nature of the problem, explanations for why victims stay with their abusers, personal testimony by a formerly battered woman, and the reasons that men batter women. It also focused on diagnostic and interview techniques and recommendations for treatment. A discussion of personal attitudes toward domestic violence was also included. At the general medical clinic, training consisted of two 50-minute seminars, whereas the family practice clinic held training in one two-hour session.

Measures

The participants were told that sometime during the following six months, at an exact time unknown to them, a standardized patient[10] would present to them as a regularly scheduled patient. Six formerly battered women were trained as standardized patients to present essentially the same situation in all encounters.* The standardized patient was instructed to offer no clue about the problem of abuse in the first part of the encounter, to give subtle cues in the middle, and, if the abuse had not yet been detected, to finally reveal that she was a battered woman.

Following each encounter, the standardized patient completed the Physician Rating Scale (adapted from another study).[6] The following areas were included in the rating scale: 1) the point at which abuse was detected during the encounter (first, second, or third part of the interview); 2) the approximate percentage of time devoted to psychosocial versus medical problems; 3) the extent of history taking; and 4) the extent of planning for victims' safety. The last two areas were measured by multi-item scales. The history-taking scale, with nine items, covered the circumstances of the

abuse, its effects on the children, prior abuse, substance abuse by either partner, and the history of psychological abuse (alpha coefficient = 0.94). The scale measuring the extent to which the physicians helped with a plan of action had five items (alpha coefficient = 0.91) covering the degree to which the physician asked about the patient's plan for safety, helped her form such a plan, made referrals, and gave other information. Interrater reliability coefficients of the Physician Rating Scale among three raters viewing the same segment of a videotaped physician–victim scenario were very high ($r = 0.84, 0.93, 0.85$).

The participants also reported the amount of prior professional exposure they had had with the topic of marital violence. In addition, they were asked about the number of women they had met who had been "hit or beaten up by their partners," including friends, relatives, coworkers, and patients.

Analysis

Because of attrition from the study and assignment to training that was not strictly random, statistical controls were used to correct possible bias. Faculty status was arbitrarily coded as the "fourth" year of "residency" to make a single scale of experience level. The strengths of associations between predictor and outcome variables were assessed with hierarchical multiple regression analysis. Because the three interview variables (psychosocial focus, history taking, and planning) were highly correlated with each other, they were standardized into equal units and combined into a single scale.†

RESULTS

The comparison between men and women physicians, regardless of whether they had the brief training, revealed some significant differences (Table 1).

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*The scenario is available from the authors on request.

†A more detailed report of the study's methods can be obtained from the authors on request.

TABLE 2

Multiple Regression Predicting Slower Detection of Woman Abuse

	r	β at Each Step	R^2 Increase	β All Entered
1. Gender (female = 1)	−0.46*	−0.46†	0.21†	−0.35‡
2. No. victims known	−0.42†	−0.36†	—	−0.25
Prior professional exposure	−0.37†	−0.29‡	—	−0.09
			0.14†	
3. Training site and year of residency			0.04	
4. Brief training	−0.03	−0.01	0.00	−0.01
			$R^2 = 0.39$†	$R = 0.63$†

*p < 0.001, one-tailed.
†p < 0.01, one-tailed.
‡p < 0.05, one-tailed.

Women physicians were rated as detecting the abuse earlier, taking an abuse history more thoroughly, and being more likely to help make a plan or referral. These differences held, but to a lesser extent, after controlling for training, background, site, and year of residency. There was also a nonsignificant tendency for women physicians to focus more on psychosocial issues during the interview.

Comparing trained and untrained participants, two of the four ratings were in the expected direction but did not reach statistical significance. Adding the control variables did not change the results; nor did results change when the analysis was conducted separately for men and women. Despite the lack of statistical support for training, there was positive anecdotal evidence of training effectiveness. These results will be reported separately.

Table 2 shows the results of the regression analysis with detection as the dependent variable. Gender explained 21% of the variance in predicting the stage of the interview at which detection occurred. Number of victims known and prior professional exposure added significantly to detection beyond that accounted for by gender (R^2 increase of 14%). When alternating the entry of variables, number of victims known added more to the variance than did prior exposure (8% vs 1%). In a bivariate analysis, prior professional exposure and personal exposure to the problem were associated with earlier detection among both men and women. The associations were especially strong for the men (prior exposure: r = 0.41, men vs 0.31, women) (victims known: r = 0.53, men vs 0.29, women). Training site, year of residency, and training did not add significantly to the variance after the above variables had been entered.

Results of the multiple regression analysis with the composite ratings showed that gender accounted for 13% of the variance. Prior contact with victims and professional exposure to the topic added 5% more to the variance beyond gender, mostly accounted for by victim contact (3%). A bivariate analysis again revealed gender differences. The men's prior contact with victims was more strongly related to their interview responses than was that of the women (r = 0.53, men vs 0.21, women). Training site, year of residency, and brief training again did not add significantly to the variance. Not surprisingly, the point at which abuse was detected played a large part in determining interview responses. Participants who detected abuse in the first two-thirds of the interview (n = 29) received higher ratings on the interview variables than did those who detected it in the final third (analysis of variance with Duncan's range test).

DISCUSSION

Background factors — the number of victims known and professional exposure to the problem — were significant contributors to outcome, particularly among men. The role of these factors is not easily interpreted because causal direction cannot be inferred. Knowing a victim or reading an article on the topic may have made participants more alert to signs of abuse. On the other hand, being alert to signs of psychosocial problems may lead to more contact with victims. Such contact may then lead to more professional interest in the problem, including more reading about it. We speculate that there are reciprocal relationships among many variables: gender, general interest in psychosocial problems, knowing a victim personally, and showing interest in the topic professionally.

The above findings need to be interpreted with some caution because of the study's limits: 1) Assignment to the trained and untrained groups was not strictly random. 2) The rating scales contained elements of subjectivity, especially since standardized patients could not be blinded to the physicians' gender. Standardized patients may have felt more comfortable revealing the abuse to women physicians, whatever the physicians' behavior. 3) Finally, the sample size did not allow us to detect small effect sizes, although small effects are not likely to be of clinical significance.

The results suggest that more thorough training may be needed. Procedures described by Mandel[6] may be more powerful: 1) presenting actual case examples from the clinic in which training is taking place; 2) involving training participants in the development of a protocol; and 3) using simulated rehearsals of new skills. Repeated and multimethod training may also be more effective. Adamowski and Burns[7] offered literature, seminars, films, and discussion groups in an inpatient setting over an extended period. In addition to training, intensive interventions by a domestic violence specialist may be required. General training can help

increase detection rates, while a specialist can help maintain training effects and provide advocacy, counseling, and referrals. Kurz nonexperimentally compared an advocacy model with brief training.[11] The advocate, a physician's assistant in the emergency room, coordinated referrals of abused women to herself and a social worker. The advocacy model had higher rates of detection and positive responses as recorded by observers. A possible effect of having a specialist is that physicians may try more diligently to detect abuse. They know that someone is there to help with the contents of the "Pandora's box." More research is needed to test all these models with experimental designs, more objective measures, and a variety of sites. These efforts are likely to improve detection, breaking the silence of domestic abuse survivors and opening new doors for them.

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REFLECTIONS

With certain limited exceptions, the laws of physical science are positive and absolute, both in their aggregate, and in their elements — in their sum, and in their details; but the ascertainable laws of the science of life are approximative only, and not absolute. — ELISHA BARTLETT (1804 – 55), *Philosophy of Medical Science*, Pt. II, Ch. 2