Communicating With Special Populations

Communicating With Patients About Intimate Partner Violence: Screening and Interviewing Approaches

Colleen T. Fogarty, MD; Sandra Burge, PhD; Elizabeth C. McCord, MS, MD

Intimate partner violence is a major public health concern; it contributes to poor physical and mental health in affected individuals, primarily women. Due to documented poor detection rates of intimate partner violence by physicians, the medical community has focused increasing attention on the successful identification of victims in all medical contexts. Family medicine educators need to be aware of the current status of knowledge about intimate partner violence and convey this to students and residents. In this article, we review the literature on screening tools to identify victims of partner violence, discuss the pitfalls of relying on screening tools, review barriers to identification of partner violence from clinician and patient perspectives, and recommend a patient-centered method for conversing with patients about intimate partner violence.

(Fam Med 2002;34(5):369-75.)

Intimate partner violence is a major public health concern; it contributes to poor physical and mental health in affected individuals, primarily women.[1-4] Data from the National Crime Victimization Survey estimates that in 1998, 1 million individuals experienced violent crime at the hands of current or former partners; 85% of the victims were women.[5] Partner violence is common across the life span, affecting adolescents in dating relationships,[6] adult women, pregnant women,[7] and elderly women.[8] Domestic violence costs the US health care system $44 million in medical costs, 40,000 physician visits, and 100,000 days in hospital stays annually.[6]

Researchers have documented high numbers of victims of intimate partner violence in clinical outpatient settings, ranging from a prevalence of 8%–22% for current abuse and 28%–36% for lifetime abuse,[9-13] where physicians, immersed in the competing demands of everyday practice, have overlooked them.[14-18]

Researchers identify victims of violence using survey methods that are impractical for use in a busy clinic.[19-22] The length of these scales precludes use as clinical screening instruments, though they have been useful in research studies to define and measure the prevalence and dynamics of abusive relationships.

The medical community has urged physicians to incorporate screening into practice.[1,23-25] In response, medical educators have developed guidelines for teaching trainees about intimate partner violence[1,26,27] and have developed resources for faculty development.[28] The medical community has developed screening strategies, modeled after research tools, to increase identification of victims of violence.[10,29-39] Although, to date, no controlled outcome studies have been done that examine screening or detection of intimate partner violence, the practice is widely encouraged[40] because asking screening questions is noninvasive, safe, and may improve outcome.[41]

In this paper, we review the literature on screening tools for intimate partner violence, discuss barriers to identification of victims from clinician and patient perspectives, and propose patient-centered strategies for communicating with patients about domestic violence.

Methods

We performed a MEDLINE search (1966 through June 2001) for articles evaluating screening tools, using the MeSH terms "domestic violence," "spouse abuse," "battered women," and the keyword "partner violence," and found 3,132 articles. We combined this set with

From the Department of Family Medicine, Boston University (Dr Fogarty), the Department of Family Medicine, University of Texas Health Sciences Center at San Antonio (Dr Burge), and Johnson City Family Practice, Johnson City, Tenn (Dr McCord).

the terms "mass screening" ("exploded"), "risk assessment," or "data collection" (exploded). The combined set yielded 833 articles. We reviewed titles and abstracts and selected 140 articles whose titles and keywords were related to screening for and detection of domestic violence by medical professionals. Of these, 13 articles evaluated specific screening tools for domestic violence.[7,10,30-33,37-39,42-45] Review of the bibliographies identified one other study for review.[46] In reviewing these articles, we identified instruments with documentation of reliability or validity, preferably both.

Results

We found five instruments that had documentation of validity and reliability,[30,31,37,38,43,46] two instruments that had validity testing only,[30,32] one instrument that had reliability testing only,[39] and two that had neither reliability or validity testing[10,44] but demonstrated an increased detection rate of domestic violence using the screening tools with patients. Four of the original 13 papers we identified[7,33,42,45] used the Abuse Assessment Screen (AAS)[46] reviewed below. Table 1 provides the complete set of questions for each reviewed instrument. Table 2 summarizes psychometric properties of each.

WAST

The Woman Abuse Screening Tool (WAST)[30] was developed for use by family physicians to identify female patients experiencing abuse in their current relationships. An initial eight-question tool was administered to a group of women from a battered women's shelter and a group of women with no known history of abuse. After initial analysis, one question was eliminated due to low correlation. Both the seven- and eight-item WAST were found to significantly correlate with the Abuse Risk Inventory (ARI);[47] correlation coefficients ranged from .80 to .85. The WAST was also able to reliably differentiate the abused from the nonabused women, both on individual items and with overall scores.[30] This study also showed that abused women felt less comfortable with the questions than the nonabused women did.

A shorter version of the WAST was created for initial screening using the two questions with the highest comfort scores (questions 1 and 2).[30] The WAST-Short correlated with the entire WAST but did not have separate reliability testing. These two questions were scored using 1 to score the most extreme response and 0 for the other responses, for a range of 0–2. Using a cut-off score of 1, this instrument identified 100% of the nonabused women and 91.7% of the abused women. Follow-up evaluation of the WAST used in family practices in London, Ontario, found a correlation coefficient of .75 of the WAST with the ARI, and physicians and patients were both comfortable with the screening instrument.[31]

WEB

The Women's Experience With Battering Scale (WEB) was originally developed based on qualitative work with abused women to measure not just physical markers of battering but also the women's psychological experiences of an abusive relationship.[48] This self-administered 10-item scale was validated in a cross-sectional study of family practice patients[43] with an alpha of .95. The measure demonstrated good agreement with the Index of Spouse Abuse (ISA) physical violence subscale. The range of scores on the WEB is 10–60; scores ≥ 20 indicate battering.[43]

HITS

HITS is a screening tool designed for use in outpatient clinical settings. This four-question screening tool is based on an acronym for Hurt, Insult, Threaten, and Scream.[38] HITS was evaluated with female family practice patients and women residing in crisis shelters or presenting to the emergency department. Responses between two groups were compared, and a significant difference in mean scores was found. Reliability was .80. Validity was demonstrated by good correlation with the Conflict Tactics Scale (CTS). The cut score was set at 10.5, which would correctly classify 96% of victims and 91% of office participants.[38]

AAS

The Abuse Assessment Screen (AAS) was developed as a five-question screen for abuse during pregnancy.[7,46,49-51] Question 3 may be omitted when interviewing nonpregnant women. The AAS is not designed to be used with a total score; therefore, each item was compared to the CTS, the ISA, and the Danger Assessment (DA) Scale[52] for validation. Reliability was assessed by the test-retest method; 48 women yielded an 83% agreement between the two measures. The investigators used a hypothesis testing approach to validity testing by comparing average scores on the DA and on specific subscales of the CTS and ISA between abused and nonabused women identified by the AAS. They found a significant difference on all the scores except for the Conflict Tactics Scale reasoning subscale.[46]

Dartmouth COOP Charts

The Dartmouth COOP Charts are picture and word questions developed for general health screening.[53] The Relationship Chart was evaluated as an intimate partner violence screen for primary care offices.[37] The Relationship Chart was validated by asking a group of 51 women in domestic abuse support groups and a control group of randomly selected patients in obstetrics and gynecology practices to complete the chart and the Abuse Behavior Inventory (ABI).[54] Test-retest correlation was .60 at 10 days; 88.4% of the responses on the 5-point scale stayed the same or shifted by only 1 point.

Table 1

Screening Instruments for Intimate Partner Violence

Screening Tool	*Items*
Woman Abuse Screening Tool (WAST)	1. In general, how would you describe your relationship? A lot of tension, some tension, or no tension 2. Do you and your partner work out arguments with . . . ? Great difficulty, some difficulty, no difficulty 3. Do arguments ever result in you feeling down or bad about yourself? 4. Do arguments ever result in hitting, kicking, or pushing? 5. Do you ever feel frightened by what your partner says or does? 6. Has your partner ever abused you physically? 7. Has your partner ever abused you emotionally? 8. Has your partner ever abused you sexually?
WAST- Short	1. In general, how would you describe your relationship? A lot of tension, some tension, or no tension 2. Do you and your partner work out arguments with . . . ? Great difficulty, some difficulty, no difficulty
Women's Experience With Battering (WEB)	1. He makes me feel unsafe even in my own home. 2. I feel ashamed of the things he does to me. 3. I try not to rock the boat because I am afraid of what he might do. 4. I feel like I am programmed to react a certain way to him. 5. I feel like he keeps me prisoner. 6. He makes me feel like I have no control over my life, no power, no protection. 7. I hide the truth from others because I am afraid not to. 8. I feel owned and controlled by him. 9. He can scare me without laying a hand on me. 10. He has a look that goes straight through me and terrifies me.
HITS	How often does your partner: 1. Physically **H**urt you 2. **I**nsult you? 3. **T**hreaten you with harm? 4. **S**cream or curse at you?
Abuse Assessment Screen (AAS)	1. Have you *ever* been emotionally or physically abused by your partner or someone important to you? 2. Within the last year, have you been hit, slapped, kicked, or otherwise physically hurt by someone? 3. Since you've been pregnant, have you been hit, slapped, kicked, or otherwise physically hurt by someone? 4. Within the last year, has anyone forced you to have sexual activities? 5. Are you afraid of your partner or anyone you listed above?
Relationship Chart	1. During the past 4 weeks, how often have problems in your household led to: insulting or swearing? yelling? threatening? hitting or pushing?
Partner Violence Screen (PVS)	1. Have you been hit, kicked, punched, or otherwise hurt by someone within the past year? If so, by whom? 2. Do you feel safe in your current relationship? 3. Is there a partner from a previous relationship who is making you feel unsafe now?
Partner Abuse Interview (PAI)	Has your partner . . . yes/no injury codes 1. Thrown something at you 2. Pushed, grabbed, or shoved you 3. Slapped you 4. Kicked, bit, hit you with a fist 5. Hit or tried to hit you with an object 6. Beat you up 7. Threatened you with a gun or knife 8. Used a gun or knife 9. Forced you to have sex when you didn't want to 10. Other

Scoring strategies for this instrument are not provided, but it is noted that as the reported frequency of abuse increases on the Likert scale, this correlates with increasing scores on the ABI. Other Dartmouth COOP charts use level 4 and 5 of the response category to indicate significant functional limitation.[37]

PVS

The Partner Violence Screen (PVS)[32] was developed for use in the Emergency Department. Validity was analyzed against the CTS[19,20] and the ISA.[22] An affirmative answer to any one of the three questions was considered to be a positive result.

Table 2

Evaluation of Intimate Partner Violence Screening Tools

Screening Tool	*Number of Items*	*Setting*	*Number*	*Reliability*	*Validity*
WAST	8	FP outpatient	307	α=.75	Correlated to ARI, *r*=.69
WAST	7	Nonmedical	24 shelter, 24 nonclinical	α=.95	Correlated to ARI, *r*=.96
WAST-Short	2	FP outpatient	307	Not tested	Correlated to WAST Sensitivity=91.7%; specificity=100%
WEB	10	FP outpatient	1,152	α=.95	Correlated to ISA-P, *r*=.67, κ=.60
HITS	4	FP outpatient	160 FP patients 99 IPV victims	α=.80	Correlated to CTS, *r*=.81 to .85 Sensitivity=96%, specificity=91%
AAS	4–5	ED	416 women with vaginal bleeding	Test-retest, 83%–100% agreement	Correlated to Danger Assessment, CTS, and ISA subscales; *P*≤.001
Relationship Chart	1	OB-GYN outpatient	48 controls, 51 victims	Test-retest, *r*=.60	Correlated to ABI, *P*= .001
PVS	3	ED	322	Not tested	Compared to CTS and ISA Sensitivity=64.5%–71.4% Specificity=80.3%–88.7%
PAI[39]	11	FP outpatient	90	κ=.77 to 1.00, α=.82	Not tested

AAS—Abuse Assessment Screen; ABI—Abuse Behavior Inventory, ARI—Abuse Risk Inventory; CTS—Conflict Tactics Scale; ED—emergency department; FP—family practice; HITS—four-question screening tool based on Hurt, Insult, Threaten, and Scream; ISA—Index of Spouse Abuse; PAI—Partner Abuse Inventory; WAST—Woman Abuse Screening Tool; WEB—Women's Experience With Battering Scale

PAI

The Partner Abuse Inventory (PAI) is an 11-item interview modified from the CTS.[39] The physical violence items were rated on a 4-point scale, and the fear item was scored on a 3-point scale. The inter-rater reliability was measured at a kappa of .77–1, and the Cronbach's alpha for the instrument was .82. No specific validity testing was done in this study.[39]

Discussion

Our review of the literature on screening instruments for domestic violence yielded several screening instruments with demonstrated reliability and validity. The WAST, WAST-Short, HITS, and the Dartmouth COOP Relationship Chart were developed for family practice settings. The WAST-Short has the advantage of using only two items (Table 1) and demonstrated both clinician and patient comfort in research and practice settings. We recommend this tool as a useful entry point to querying patients about violence. The HITS has the potential advantage of a mnemonic device, analogous to the CAGE instrument for alcohol screening;[55,56] however, no one has demonstrated patient comfort with this instrument. The Relationship Chart has the appeal of being a single item, with a pictorial format, which may be useful for practices that use routine patient-administered databases but may be less practical for clinician-initiated questioning. The five-item AAS, the 10-item WEB, and the 11-item PAI may prove too long to use in routine screening.

The PVS did not provide reliability testing; further, the sensitivity (64%–71%) and specificity (80.3%–88.7%) are lower than that for the WAST-Short. The brevity of the scale and the question about safety are useful, but we do not think this has significant advantages over the other tools.

We recommend using these screening tools in routine practice. However, unlike a biochemical screening test, the effectiveness of these screening tools relies critically on the clinician-patient relationship. One study of a written self-report screen[57] identified 7% of Planned Parenthood patients as abused. When a nurse interviewer asked the same questions, the prevalence of patients identified as abused was nearly 30%. This study provides highly suggestive evidence that the interpersonal nature of the questioning has much more to do with disclosure than the questions themselves. Barriers to mutual understanding and disclosure exist on both sides of the clinician-patient relationship.

The Physician's Perspective

A landmark qualitative study done in 1990[58] found that physicians' unwillingness to ask questions about intimate partner violence stemmed largely from fear of "opening Pandora's box" or opening a "can of worms." Subsequent studies have identified barriers for physicians' screening for intimate partner violence in three general spheres: psychological issues, attitudes, and health systems barriers[16,59-61] (Table 3). Physician management in cases of female partner violence relates to whether the woman acknowledges or reveals the abuse.[62]

Women understand and recognize abuse and actually consider more behaviors abusive than those typically cited in the literature.[63] This supports the concept that women in abusive situations recognize abusive behaviors and refutes the perception of nearly 75% of clinicians in one study, who stated, "What I view as abuse, my patient accepts as normal."[60]

The Patient's Perspective

Clinical anecdotal experience with patients,[64,65] survey data,[66] and qualitative findings[67-70] suggest that a battered woman's ability to answer any screening tool candidly is a complex process. Factors involved in this process include the woman's recognition of a problem, her willingness to trust her clinician with this information, and her perception of the clinician's openness to hearing her story with compassion and without judgement. The cycle of abuse often leaves a woman feeling disempowered and lacking credibility, both of which may leave her vulnerable to nonrecognition of a problem, fear of disclosure, and fear of partner retaliation or escalated violence.

Compared to women who have not been abused, battered women feel less satisfied with medical encounters,[71,72] perceive poorer communication with the physician, and are less likely to feel respected and accepted during the medical encounter.[71,72] Barriers to patient disclosure of intimate partner violence include psychological factors, social factors, and health system barriers[67,68] (Table 3).

Abused women have made suggestions for health care providers to assist women with disclosure. These women recommend a good patient-provider relationship composed of trust, compassion, support, and confidentiality. They encourage direct questioning by the physician for routine screening for abuse and when the patient has obvious injury or subtle signs of abuse. Women say they would be more likely to disclose abusive situations if they perceived the clinician to be caring and compassionate, easy to talk with, and protective, and if they were asked in a private manner and offered follow-up care. Women endorsed being given emotional support, being asked for any questions or concerns, and being examined in a dignified and sensitive manner.[66,68,70]

These studies of battered women thus strongly support the importance of both screening for intimate partner violence and doing so in the context of excellent clinical communication and a positive clinician-patient relationship.

Educational Issues

Medical educators have a responsibility to teach trainees the skills to screen for and diagnose intimate partner violence while recognizing that a significant portion of learners and teachers in the medical community have personal histories of family violence.[77,78] Well-designed studies have demonstrated that trainees increase their feelings of competence and rate of diagnosis after exposure to educational programs about domestic violence.[81,82] However, family practice residencies on average provide only 4–5 hours training annually about detection of intimate partner violence, mostly in the form of didactic lectures.[27] Therefore, having a screening tool or programmed set of questions is useful for trainees who are learning to ask about sensitive issues like domestic violence.

Table 3

Barriers to Disclosure of Intimate Partner Violence

PHYSICIAN FACTORS[16,58-60]	**PATIENT FACTORS**[67,71,72,84]
Psychological factors	*Psychological factors*
Fear of offending patient	Fear (partner retaliation or escalated violence)
Powerlessness	Shame
Loss of control	Embarrassment
Over-identification (with victim)	
	Social factors
Attitudes	Obligation to family/partner
Beliefs	
Patients lack initiative	*Health system barriers*
Patients won't admit to abuse	Disinterested/unsympathetic clinicians
Prejudices	Not being believed by clinician
Class elitism	Poor communication with clinician
Racial prejudice	Not feeling respected or accepted
Patients are "noncompliant"	Lack of clinician time
	Long waiting times
Health system barriers	Health care costs
Time limitations	Possible legal involvement

Conclusions

This paper has focused on increasing physicians' skill at identifying intimate partner violence, using both a screening approach and patient-centered strategies. Future research needs to address several related issues of relevance to clinical family medicine. First, we need to understand the full spectrum of intimate partner violence. Second, we need to develop effective treatment and prevention strategies, with special attention toward practices that care for both partners in a violent couple.[83] Third, we must examine outcomes related to improved physician detection and management of intimate partner violence. Finally, we need to develop effective strategies for screening men for partner violence. Ultimately, our work should lead to strategies that prevent violence and promote peace in families.

Corresponding Author: Address correspondence to Dr Fogarty, Boston University, Department of Family Medicine, Dowling 5 South, Boston, MA 02118. 617-414-4465. Fax: 617-414-3345. Colleen.fogarty@bmc.org

References

1. Anonymous. Educating the nation's physicians about family violence and abuse. Acad Med 1997;72(1 suppl):Sv-viii, S3-115.
2. Anonymous. Healthy people 2010: injury and violence prevention. US Department of Health and Human Services, Office of Disease Prevention and Health Promotion, 2000.
3. Koss MP, Heslet L. Somatic consequences of violence against women. Arch Fam Med 1992;1(1):53-9.
4. McCauley J, et al. The "battering syndrome": prevalence and clinical characteristics of domestic violence in primary care internal medicine practices. Ann Intern Med 1995;123(10):737-46.
5. Rennison CM, Welchans S. Intimate partner violence. Bureau of Justice statistics. Washington, DC: Bureau of Justice, 2000.
6. Easley M. Domestic violence. Ann Emerg Med 1996;27(6):762-3.
7. Greenberg EM, McFarlane J, Watson M. Vaginal bleeding and abuse: assessing pregnant women in the emergency department. Matern Child Nurs J 1997;22(July/Aug):182-6.
8. McCoy M. Domestic violence: clues to victimization. Ann Emerg Med 1996;27(6):764-5.
9. Elliott BA, Johnson MM. Domestic violence in a primary care setting. Patterns and prevalence. Arch Fam Med 1995;4(2):113-9.
10. Freund KM, Bak SM, Blackhall L. Identifying domestic violence in primary care practice. J Gen Intern Med 1996;11(1):44-6.
11. Gin NE, Rucker L, Frayne S, Cygan R, Hubbell FA. Prevalence of domestic violence among patients in three ambulatory care internal medicine clinics. J Gen Intern Med 1991;6(4):317-22.
12. Hamberger LK, Saunders DG, Hovey M. Prevalence of domestic violence in community practice and rate of physician inquiry. Fam Med 1992;24(4):283-7.
13. Johnson M, Elliott BA. Domestic violence among family practice patients in midsized and rural communities. J Fam Pract 1997;44(4):391-400.
14. Brown JB, Lent B, Sas G. Identifying and treating wife abuse. J Fam Pract 1993;36(2):185-91.
15. deLahunta EA. Hidden trauma: the mostly missed diagnosis of domestic violence. Am J Emerg Med 1995;13(1):74-6.
16. Ferris LE, Tudiver F. Family physicians' approach to wife abuse: a study of Ontario, Canada, practices. Fam Med 1992;24(4):276-82.
17. Gremillion DH, Kanof EP. Overcoming barriers to physician involvement in identifying and referring victims of domestic violence. Ann Emerg Med 1996;27(6):769-73.
18. Reid SA, Glasser M. Primary care physicians' recognition of and attitudes toward domestic violence. Acad Med 1997;72(1):51-3.
19. Straus M. Measuring intrafamily conflict and violence: the Conflict Tactics (CT) Scales. Journal of Marriage and the Family 1979;41:75-85.
20. Straus M. Conflict Tactics Scales. In: Fredman N, Sherman R, eds. Handbook of measurements for marriage and family therapy. New York: Brunner/Mazel:159-62.
21. Poteat GM, Grossnickle WF, Cope JG, Wynne DC. Psychometric properties of the Wife Abuse Inventory. J Clin Psychol 1990;46(6):828-34.
22. Campbell DW, King C, Parker B, Ryan J. The reliability and factor structure of the index of spouse abuse with African American women. Violence Vict 1994;9(3):259-74.
23. Adams D. Guidelines for doctors on identifying and helping their patients who batter. J Am Med Womens Assoc 1996;51(3):123-6.
24. Anonymous. Physicians and domestic violence. Ethical considerations. Council on Ethical and Judicial Affairs, American Medical Association. JAMA 1992;267(23):3190-3.
25. Anonymous. Domestic violence: the role of emergency medical services personnel. American College of Emergency Physicians. Ann Emerg Med 1996;27(6):845.
26. Anonymous. Responding to domestic violence: a coordinated response by a consortium of teaching hospitals. Domestic Violence Task Force, Conference of Boston Teaching Hospitals. Acad Med 1997; 72(1 suppl): S59-S64.
27. Rovi S, Mouton C. Domestic violence education in family practice residencies. Fam Med 1999;31(6):398-403.
28. Albright CL. Resources for faculty development in family violence. Acad Med 1997;72(1 suppl):S93-S101.
29. Ashur ML. Asking about domestic violence: SAFE questions (letter). JAMA 1993;269(18):2367.
30. Brown JB, Lent B, Bratt PJ, Sas G, Pederson LL. Development of the Woman Abuse Screening Tool for use in family practice. Fam Med 1996;28(6):422-8.
31. Brown JB, Lent B, Schmidt G, Sas G. Application of the Woman Abuse Screening Tool (WAST) and WAST-short in the family practice setting. J Fam Pract 2000;49(10):896-903.
32. Feldhaus KM, Koziol-McLain J, Amsbury HL, Norton IM, Lowenstein SR, Abbott JT. Accuracy of three brief screening questions for detecting partner violence in the emergency department. JAMA 1997; 277(17):1357-61.
33. McFarlane J, Greenberg L, Weltge A, Watson M. Identification of abuse in emergency departments: effectiveness of a two-question screening tool. J Emerg Nurs 1995;21(5):391-4.
34. Neufeld B. SAFE questions: overcoming barriers to the detection of domestic violence. Am Fam Physician 1996;53(8):2575-80, 2582.
35. Olson L, Anctil C, Fullerton L, Brillman J, Arbuckle J, Sklar D. Increasing emergency physician recognition of domestic violence. Ann Emerg Med 1996;27:741-6.
36. Waller AE, Hohehaus SM, Shah PJ, Stern EA. Development and validation of an emergency department screening and referral protocol for victims of domestic violence. Ann Emerg Med 1996;27(6):754-60.
37. Wasson JH, Jette AM, Anderson J, Johnson DJ, Nelson EC, Kilo CM. Routine, single-item screening to identify abusive relationships in women. J Fam Pract 2000;49(11):1017-22.
38. Sherin KM, Sinacore JM, Li XQ, Zitter RE, Shakil A. HITS: a short domestic violence screening tool for use in a family practice setting. Fam Med 1998;30(7):508-12.
39. Pan HS, Ehrensaft MK, Heyman RE, O'Leary KD, Schwartz R. Evaluating domestic partner abuse in a family practice clinic. Fam Med 1997;29(7):492-5.
40. Cole TB. Is domestic violence screening helpful? JAMA 2000;284(5): 551-3.
41. Chescheir N. Violence against women: response from clinicians. Ann Emerg Med 1996;27(6):766-8.
42. Canterino JC, Van Hom LG, Harrigan JT, Ananth CV, Vintzileos AM. Domestic abuse in pregnancy: a comparison of a self-completed domestic abuse questionnaire with a directed interview. Am J Obstet Gynecol 1999;181(5):1049-51.
43. Coker AL, Pope BO, Smith PH, Sanderson M, Hussev JR. Assessment of clinical partner violence screening tools. J Am Med Womens Assoc 2001;56(1):19-23.
44. Morrison LJ, Allan R, Grunfeld A. Improving the emergency department detection rate of domestic violence using direct questioning. J Emerg Med 2000;19(2):117-24.
45. Norton LB, Peipert JF, Zierler S, Lima B, Hume L. Battering in pregnancy: an assessment of two screening methods. Obstet Gynecol 1995;85(3):321-5.

46. Soeken K. The Abuse Assessment Screen: a clinical instrument to measure frequency, severity, and perpetrator of abuse against women. In: Campbell J, ed. Empowering survivors of abuse: health care for battered women and their children. Thousand Oaks, Calif: Sage Publications, 1998:195-203.
47. Yegidis B. Abuse risk inventory manual. Palo Alto, Calif: Consulting Psychologist Press, 1989.
48. Smith PH, Earp JA, DeVellis R. Measuring battering: development of the Women's Experience With Battering (WEB) Scale. Womens Health 1995;1(4):273-88.
49. McFarlane J, Parker B, Soeken K, Bullock L. Assessing for abuse during pregnancy. Severity and frequency of injuries and associated entry into prenatal care. JAMA 1992;267(23):3176-8.
50. McFarlane J, Gondolf E. Preventing abuse during pregnancy: a clinical protocol. MCN Am J Matem Child Nurs 1998;27:27.
51. Wiist WH, McFarlane J. The effectiveness of an abuse assessment protocol in public health prenatal clinics. Am J Public Health 1999;89(8): 1217-21.
52. Campbell J. Nursing assessment for risk of homicide with battered women. Advances in Nursing Science 1986;8(4):36-51.
53. Wasson JH, Jette AM, Johnson DJ, Mohr JJ, Nelson EC. A replicable and customizable approach to improve ambulatory care and research. J Ambulatory Care Manage 1997;20(1):17-27.
54. Shepard M, Campbell J. The Abusive Behavior Inventory: a measure of psychological and physical abuse. Journal of Interpersonal Violence 1992;7(3):291-305.
55. Kitchens JM. Does this patient have an alcohol problem? JAMA 1994; 272(22):1782-7.
56. Mayfield D, McLeod G, Hall P. The CAGE questionnaire: validation of a new alcoholism screening instrument. Am J Psychiatry 1974; 131(10):1121-3.
57. McFarlane J, Christoffel K, Bateman L, Miller V, Bullock L. Assessing for abuse: self-report versus nurse interview. Public Health Nurs 1991;8(4):245-50.
58. Sugg NK, Inui T. Primary care physicians' response to domestic violence: opening Pandora's box. JAMA 1992;267(23):3157-60.
59. Ferris LE. Canadian family physicians' and general practitioners' perceptions of their effectiveness in identifying and treating wife abuse. Med Care 1994;32(12):1163-72.
60. Centers for Disease Control. Rural health care providers' attitudes, practices, and training experience regarding intimate partner violence–West Virginia, March 1997. Morb Mortal Wkly Rep 1998;47(32):670-3.
61. Cohen S, De Vos E, Newberger E. Barriers to physician identification and treatment of family violence: lessons from five communities. Acad Med 1997;72(1 suppl):S19-S25.
62. Ferris LE, Norton P, Dunn EV, Gort EH. Clinical factors affecting physicians' management decisions in cases of female partner abuse. Fam Med 1999;31(6):415-25.
63. Wagner PJ, Mongan PF. Validating the concept of abuse: women's perceptions of defining behaviors and the effects of emotional abuse on health indicators. Arch Fam Med 1998;7(1):25-9.
64. Radomsky NA. Life's stories: her eyes and my glasses. Fam Med 1992; 24(4):273-4.
65. Kiomento H. A piece of my mind. The intervention. JAMA 1998; 280(17):1477.
66. Hamberger LK, Ambuel B, Marbella A, Donze J. Physician interaction with battered women: the women's perspective. Arch Fam Med 1998;7(6):575-82.
67. Gerbert B, Johnston K, Caspers N, Bleecker T, Woods A, Rosenbaum A. Experiences of battered women in health care settings: a qualitative study. Women Health 1996;24(3):1-17.
68. Rodriguez MA, Quiroga SS, Bauer HM. Breaking the silence. Battered women's perspectives on medical care. Arch Fam Med 1996;5(3): 153-8.
69. Rodriguez MA, Bauer HM, Flores-Ortiz Y, Szkupinski-Quiroga S. Factors affecting patient-physician communication for abused Latina and Asian immigrant women. J Fam Pract 1998;47(4):309-11.
70. McCauley J, Yurk RA, Jenckes MW, Ford DE. Inside "Pandora's Box:" abuse women's experiences with clinicians and health services. J Gen Intern Med 1998;13:549-55.
71. Plichta SB, Duncan MM, Plichta L. Spouse abuse, patient-physician communication, and patient satisfaction. Am J Prev Med 1996;12(5): 297-303.
72. McNutt LA, Van Ryn M, Clark C, Fraiser I. Partner violence and medical encounters: African-American women's perspectives. Am J Prev Med 2000;19(4):264-9.
73. Stewart M. Patient-centered medicine: transforming the clinical method. Thousand Oaks, Calif: Sage Publications, 1995:267.
74. Lang F, Floyd MR, Beine KL. Clues to patients' explanations and concerns about their illnesses. A call for active listening. Arch Fam Med 2000;9(3):222-7.
75. Gerbert B, Caspers N, Bronstone A, Moe J, Abercrombie P. A qualitative analysis of how physicians with expertise in domestic violence approach the identification of victims. Ann Intern Med 1999;131(8):578-84.
76. Levinson W, Gorawara-Bhat R, Lamb J. A study of patient clues and physician responses in primary care and surgical settings. JAMA 2000; 284(8):1021-7.
77. Cullinane PM, Alpert EJ, Freund KM. First-year medical students' knowledge of, attitudes toward, and histories of family violence. Acad Med 1997;72(1):48-50.
78. deLahunta EA, Tulsky AA. Personal exposure of faculty and medical students to family violence. JAMA 1996;275(24):1903-6.
79. Fink MJ. Analyzing power relationships to teach about domestic violence. Acad Med 2001;76(5):528.
80. Baker NJ. Strategic footholds for medical education about domestic violence. Acad Med 1995;70(11):982-8.
81. Coonrod DV, Bay RC, Rowley BD, et al. A randomized controlled study of brief interventions to teach about domestic violence. Acad Med 2000;75(1):55-7.
82. Jonassen JA, Mazor K, Sefton L. Identification of factors that influence the likelihood of screening for domestic violence by medical students and residents. Acad Med 2001;76(5):529.
83. Ferris LE, Norton PG, Dunn EV, Gort EH, Degani N. Guidelines for managing domestic abuse when male and female partners are patients of the same physician. JAMA 1997; 278(10):851-7.