Domestic violence: Screening made practical

Mallika Punukollu, MD
University of Pittsburgh Medical Center, Shadyside Family Practice Residency, Pittsburgh, Pa

Practice recommendations

- Physicians should routinely screen women for domestic violence (**C**). Although the US Domestic Task Force considers the evidence for or against specific instruments insufficient, the recommendation to include questions about physical abuse may be made on other grounds, such as the high prevalence of undetected abuse among women patients, the potential value of this information in helping such patients, and the low cost and low risk of screening.
- Offer abused patients information about community resources and advocates (**B**). Advocacy and connections with community agencies have proven helpful (in a randomized controlled trial) in improving quality of life and preventing violence-related injuries.

Correspondence: Mallika Punukollu, MD, PO Box B135, Huddersfield, West Yorkshire, HD1 1YG, UK. E-mail: mallika72@hotmail.com.

Screening is effective in detecting domestic violence, and increases the rate of referrals to community resources, resulting in improved quality of life and fewer violence-related injuries.

Screening can be accomplished with a questionnaire filled out by the patient or a directed interview conducted by you or a staff member.

Newer screening tools are briefer and easier to use than before. A self-administered questionnaire can even become part of the routine intake at annual health examinations.

These advances may be a remedy for a finding of one study—only 10% of primary care physicians routinely screen for domestic violence.[1] Although 92% of women surveyed who were physically abused by their partners did not discuss these incidents with their physicians,[2] studies show they would like their health care providers to ask about abuse.[3–5]

HOW SCREENING MAKES A DIFFERENCE

Domestic violence is a chronic life-threatening condition that is treatable. If abuse is left untreated, the severity and frequency of abuse can worsen, leading to serious adverse effects to health

TABLE 1

History and physical findings suggestive of abuse

- Inconsistent explanation of injuries or delay in seeking treatment[15]
- Somatic complaints[16]
- Psychiatric illness[17]
- Frequent visits to the emergency room[18]
- Injuries, especially to head and neck[19]
- Low birth weight[20]

and potentially life-threatening consequences.[6,7] However, if we identify victims by screening and offer information including safety plans and referrals to advocacy services, the prognosis is improved in terms of reported quality of life and fewer violence-related injuries (LOE: **1b**).[8,9]

Although the effectiveness of screening on every aspect of the recovery process has not been validated by randomized controlled trials, the current literature certainly suggests likely benefit in certain stages. Qualitative evidence from abuse victims supports the assumption that screening for abuse enables patients to recognize a problem, even if they are not ready for help at that point.[10]

PREVALENCE OF DOMESTIC VIOLENCE

A study by the Centers for Disease Control and Prevention of 1,691,600 women found that 30% had experienced domestic violence during their lifetimes.[11] The prevalence of domestic violence is difficult to measure due to different definitions of abuse and factors that preclude accurate reporting by victims, such as safety and social stigma.

One anonymous survey in a family practice setting found that 23% of women had been physically assaulted by their partners in the past year,[12] and another anonymous survey of 1952 female patients attending 4 different community-based primary care practices found that 1 of every 5 had experienced violence in their adult lives.[13]

Domestic violence is also a financial burden to victims and to society: domestic violence victims have 2.5 times greater outpatient costs than do nonvictims.[14]

WHY SCREEN ALL WOMEN?

Particular history and physical findings are associated with increased likelihood of domestic violence (**Table 1**).[15–20] Neither victims nor batterers fit a distinct personality or profile, however, and abuse affects women of all ages, ethnicities, and socioeconomic classes. Predicting which women will be affected is difficult,[21,22] which suggests that universal screening is more appropriate than targeting specific groups (LOE: **5**).

The US Preventive Services Task Force (USPTF) gave a strength of recommendation of **C** for domestic violence screening because evidence to recommend for or against use of specific screening instruments is insufficient.[23] Two recent systematic reviews concluded that evidence is lacking for the effectiveness of interventions for women experiencing abuse, and the potential harms of identifying and treating abused women are not well evaluated.[24,25] However, the USPTF noted that asking questions about physical abuse is justifiable on other grounds, such as the high prevalence of undetected abuse among women patients, the potential value of this information in helping such patients, and the low cost and low risk from screening.

The American Academy of Family Physicians,[26] the American College of Physicians,[27] the American Medical Association,[28] and the American College of Obstetricians and Gynecologists[29,30] all recommend screening for domestic violence. Screening does increase the detection of domestic violence.[25] The screening can be a questionnaire filled out by the patient or a directed interview conducted by a staff member or physician. Two recent studies found that questionnaires are better than interviews at detecting domestic violence (LOE: **2b**).[31,32]

The Joint Commission on Accreditation of Healthcare Organizations now mandates that all hospitals screen patients for domestic violence.[33] Educating health care providers about domestic violence and screening improves their self-reported ability to identify and manage abuse victims.[34,35] In addition, screening for domestic violence increases the rate of referrals to community resources.[34,35] Administrative changes, guidelines, protocols, and changes to standardized medical record forms to assist screening for domestic violence increase identification of victims[35–37] and help maintain sustained change in screening behavior over more than 12 months.[1]

2 USEFUL SCREENING INSTRUMENTS

New screening tools are briefer and more efficient than earlier devices.

The **HITS Scale**[38] (Hurt, Insult, Threaten, Scream; **Table 2**) is a practical 4-item scale. It has been validated in the family practice setting in a study that compared 160 family practice patients whose abuse status was unknown with 99 self-identified victims of abuse.

The **Woman Abuse Screening Tool** (WAST; **Appendix A,** available online at http://www.jfponline.com) was developed for the family practice setting. It was validated by a study comparing the responses between 24 self-identified abused women from shelters and 24 nonabused women recruited from the principal investigator's professional contacts.[39]

The first 2 questions of the WAST screen make up the **WAST-short** questions:

1. In general, how would you describe your relationship? (A lot of tension; some tension; no tension)
2. Do you and your partner work out arguments with…? (great difficulty; some difficulty; no difficulty)

These questions assess the degree of relationship tension and the amount of difficulty the patient and her partner have in working out arguments. If a patient answers affirmatively to these 2 questions, then the physician can use the remaining WAST questions to elicit more information about the patient's experience of abuse. A Spanish version of the WAST has been shown to be successful as well.[40]

TABLE 2

The HITS screen

Hurt	How often does your partner physically hurt you?
Insult	How often does your partner insult or talk down to you?
Threaten	How often does your partner threaten you with physical harm?
Scream	How often does your partner scream or curse at you?

Each question is answered on a 5-point scale: 1 = never, 2 = rarely, 3 = sometimes, 4 = fairly often, 5 = frequently. The score ranges from 4 to a maximum of 20. A score of ≥10 is considered diagnostic of abuse.

The WAST and HITS scales need to be further evaluated prospectively in larger populations with a high prevalence of abuse. In addition, nonbiased samples need to be recruited and the tests need to be validated against a criterion standard.

The HITS scale has been tested in English-speaking populations only. The ability to screen different ethnic groups and ask sensitive questions across cultural barriers is important and should be studied further.

The **Women's Experience with Battering Scale**[41] **(Table 3)** is a series of 10 questions tested in a large cross-sectional survey of women (n=1152) attending 1 of 2 family practice clinics. It has been validated in a study using the Index of Spouse Abuse as a reference standard (18% of the women surveyed had experienced violence in a current or most recent intimate relationship with a male partner). For every 100 female patients seen, a physician will correctly identify 16 of 18 abuse victims and will incorrectly label 7 nonabused women as victims. For this reason, a positive screen using any instrument must be followed-up by a careful interview before further intervention.

TABLE 3

Women's Experience with Battering Scale

Description of how your partner makes you feel	Agree strongly	Agree somewhat	Agree a little	Disagree a little	Disagree somewhat	Disagree strongly
1. He makes me feel unsafe even in my own home	6	5	4	3	2	1
2. I feel ashamed of the things he does to me	6	5	4	3	2	1
3. I try not to rock the boat because I am afraid of what he might do	6	5	4	3	2	1
4. I feel like I am programmed to react in a certain way to him	6	5	4	3	2	1
5. I feel like he keeps me prisoner	6	5	4	3	2	1
6. He makes me feel like I have no control over my life, no power, no protection	6	5	4	3	2	1
7. I hide the truth from others because I am afraid not to	6	5	4	3	2	1
8. I feel owned and controlled by him	6	5	4	3	2	1
9. He can scare me without laying a hand on me	6	5	4	3	2	1
10. He has a look that goes straight through me and terrifies me	6	5	4	3	2	1

To score this scale, add the responses for items 1 through 10. The score range is 10 to 60. A score of 20 or higher is a positive screening test for battering.

Unlike other tests, the Women's Experience with Battering Scale was conducted in a relatively larger, unbiased, sample population, had good accuracy, and is recommended. The only drawback is the length, but it can be self-administered as part of a routine intake for an annual health maintenance examination.

Older, less useful tools

The **Conflicts Tactics Scale** was one of the first instruments to identify partner violence by measuring interpersonal aggression. The original screen consisted of 19 questions.[42] The **Index of Spouse Abuse** is a 30-item self-report scale designed to measure the severity or magnitude of physical and nonphysical abuse inflicted on a woman by her male partner.[43] Detailed independent evaluations by experienced therapists to determine whether an individual is a victim of partner abuse, considered to be the gold standard, have been used to validate the Index of Spouse Abuse. However, the Index of Spouse Abuse and Conflicts Tactics Scale are impractical for routine use in the office due to their length and complexity. **Table 4** compares these screening tests.

HOW PHYSICIANS CAN HELP ENSURE SAFETY

Table 5 shows the strength of recommendation supporting different aspects of treatment. The care of the abused woman requires a multidisciplinary team approach involving institutional and community services.[28] The literature suggests that once a victim of abuse is identified in an office

TABLE 4

Performance characteristics of domestic violence screening instruments

Test	LOE	Sn, %*	Sp, %*	LR+, %	LR–, %	PV+, %†	PV–, %†
ISA-P[28] ∂1	1b	90.7	92.2	11.4	0.1	72	2.15
ISA-NP[28] ∂1	1b	90.7	90.6	10.1	0.1	69	2.15
WEB[32] ∂2	1b	86	91	9.56	0.15	67.8	3.2
HITS[29] ∂3	3b	96	91	10.7	0.04	70.2	0.87
WAST[30] ∂3	3b	83	75	3.32	0.23	42.2	4.82

*Sensitivity and specificity summarized as reported in individual studies.

†Posttest probability was calculated assuming a pretest probability of 18%.

Sn, sensitivity; Sp, specificity; LR+, positive likelihood ratio; LR–, negative likelihood ratio; PV+, probability of disease given a positive test; PV–, probability of disease given a negative test; ∂, reference standard; ∂1, detailed interview; ∂2, ∂3, Index of Spouse Abuse self-identified abuse victims; ISA-P, Index of Spouse Abuse scale measuring the severity or magnitude of physical abuse inflicted on a woman by her male partner; ISA-NP, Index of Spouse Abuse scale measuring the severity or magnitude of nonphysical abuse inflicted on a woman by her male partner; WEB, Women's Experience with Battery Scale; HITS, hurt, insult, threaten, scream; WAST, Woman Abuse Screening Tool

setting, a primary care physician can improve outcome by caring for acute injuries,[28] offering support, and making appropriate referrals.

A physician can help ensure safety by:

- **Assessing immediate risk.** Has the violence increased in frequency or severity over the past year? Has your partner threatened to kill you or your children? Are there weapons in the house? Does your partner know that you are planning to leave? (LOE: **5**)[44]

If immediate risk appears high, then it is important to emphasize to the patient that her situation could be life-threatening, to explain her options, and to encourage immediate referral to community resources with assistance from security and law enforcement, if necessary (LOE: **5**)[45]

- **Discussing safety behaviors.** This includes advice on self-protection (ie, removal of weapons from the home) and planning for leaving safely in a threatening situation. One study of abused pregnant mothers found that receiving a safety intervention protocol significantly increased the safety behaviors adopted during and after pregnancy (from 47.6% at visit 1 to 78.1% at visit 6; $P \leq .001$), preventing further abuse and increasing the safety and well-being of mother and baby (LOE: **2c**)[8]
- Helping the patient obtain a **civil protection order.** This can be obtained with the assistance of the police or community advocacy services. Women with permanent protection orders are less likely than those without orders to be physically abused (risk ratio in 12 months, 0.2; 95% confidence interval, 0.1–0.8; LOE: **2b**).[46]
- **A trusting relationship** with the patient can help her break the cycle of abuse and enable her to change her circumstances (LOE: **4**).[47] A qualitative study showed that battered women have rated the following behaviors highly desirable in their physicians (LOE: **4**).[10]
  - Initially validates their experiences with compassionate messages and emphasizes their worth as human beings
  - Clearly labels the abuse as wrong and criminal
  - Listens in a careful, nonjudgmental manner.

Having someone to confide in and having told someone about the abuse were factors associated with diminished abuse at 3 months in one study (P=.001 and .023, respectively) (LOE: **2c**).[48]

TABLE 5

Evidence supporting interventions for domestic violence

SOR	Treatment
A	Community-based advocacy intervention programs[40]
B	Safety intervention protocols[35]
B	Civil protection order[36]
B	Telling or confiding in someone[39]
B	Contact with community resources on domestic violence[39]
B	On-site advocacy programs[41]
C	Validating the patient's experience[38]
C	Assessing immediate safety and emphasizing potential for lethal outcome[33,34]

SOR, strength of recommendation. For an explanation of the recommendations, see page 536.

REFERRAL TO COMMUNITY RESOURCES

A randomized controlled trial with 2-year follow-up investigated community-based advocacy for abused women who were leaving a shelter program. This study found that advocacy services led to significantly greater effectiveness in obtaining resources, a decrease in physical violence, a decrease in depression, and an improved quality of life and social support at 10 weeks post-shelter. At 2 years, advocacy services led to reduced physical violence (11% vs 24%, $P \leq .05$, number needed to treat=7.7), increased likelihood of leaving the abusive relationship (96% vs 87%, number needed to treat=11, $P<.03$), and improved quality of life ($P \leq .01$) (LOE: **1b**).[9]

Straus and colleagues[48] associated contact with community domestic violence resources with a decreased sense of community isolation (LOE: **2c**). The National Domestic Violence Hotline (800-799-SAFE) can provide physicians in every state with information on local resources.

Muelleman and Feighny[49] found that advocacy programs that are available on-site can improve the use of shelters and shelter-based counseling (LOE: **2c**). However, there are no studies of suitable quality comparing outcomes for women using shelters with women not using shelters.[24] Bias-free samples would be difficult to recruit. One study that evaluated experiences before and after shelter found that women experienced less violence after the shelter stay (LOE: **2c**).[50]

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REFERENCES

1. Elliot L, Nerney M, Jones T, Friedman PD. Barriers to screening for domestic violence. *J Gen Intern Med* 2002; 17:112–116.
2. The Commonwealth Fund National Survey. First comprehensive national survey of American women finds them at significant risk [news release]. New York, NY: Commonwealth Fund; 1993.
3. Fogarty CT, Burge S, McCord EC. Communicating with patients about intimate partner violence: screening and interviewing approaches. *Fam Med* 2002; 34:369–375.
4. Rodriguez M, Quiroga SS, Bauer H. Breaking the silence: battered women's perspectives on medical care. *Arch Fam Med* 1996; 5:153–158.
5. Rodriguez MA, Sheldon WR, Bauer HM, et al. The factors associated with disclosure of intimate partner abuse to clinicians. *J Fam Pract* 2001; 50:338–344.
6. US Bureau of Justice Statistics. Highlights from 20 years of surveying crime victims: the National Crime Victimization survey, 1973–1992. Washington, DC: US Department of Justice; 1993.
7. Berrios DC, Grady D. Domestic violence: risk factors and outcome. *West J Med* 1991; 155:133–135.
8. McFarlane J, Parker B, Soeken K, et al. Safety behaviors of abused women after an intervention during pregnancy. *J Obstet Gynecol Neonatal Nurs* 1998; 27:64–69.
9. Sullivan CM, Bybee DI. Reducing violence using community-based advocacy for women with abusive partners. *J Consult Clin Psychol* 1999; 67:43–53.
10. Nicolaidis C. The voices of survivors' documentary. Using patient narrative to educate physicians about domestic violence. *J Gen Intern Med* 2002; 17:117–124.
11. Centers for Disease Control and Prevention. Lifetime and annual incidence of intimate partner violence and resulting injuries—Georgia, 1995. *MMWR Morb Mortal Wkly Rep* 47; 1998; 47:849–853.

12. Hamberger KL, Saunders DG, Hovey M. Prevalence of domestic violence in community practice and rate of physician inquiry. *Fam Med* 1992; 24:283–287.
13. McCauley J, Kern DE, Kolodner K, et al. The "battering syndrome": prevalence and clinical characteristics of domestic violence in primary care internal medicine practices. *Ann Intern Med* 1995; 123:737–746.
14. Koss MP, Koss PG, Woodruff WJ. Relation of criminal victimization to health perceptions among women medical patients. *Arch Intern Med* 1991; 151:342–347.
15. Fanslow JL, Norton RN, Spinola CG. Indicators of assault-related injuries among women presenting to the Emergency Department. *Ann Emerg Med* 1998; 32:341–348.
16. Drossman DA. Lesserman J, Nachman G et al. Sexual and Physical abuse in women with functional or organic gastrointestinal disorders. *Ann Intern Med* 1990; 113:828–833.
17. Danielson KK, Moffitt TE, Caspi A, Silva PA. Comorbidity between abuse of an adult and DSM-III-R mental disorders: Evidence from an epidemiological study. *Am J Psychiatry* 1998; 155:131–133.
18. Bergman B, Brismar B. A 5-year follow up study of 117 battered women. *Am J Public Health* 1991; 81:1486–1489.
19. Muelleman RL, Lenaghan PA, Pakieser RA. Battered women: injury locations and types. *Ann Emerg Med* 1996; 28:486–492.
20. Murphy CC, Schei B, Myhr TL, DuMont J. Abuse: A risk factor for low birth weight? A systematic review and meta-analysis. *CMAJ* 2001; 164:1578–1579.
21. Saunders DG, Hamberger K, Hovey M. Indicators of woman abuse based on a chart review at a family practice center. *Arch Fam Med* 1993; 2:537–543.
22. Wasson JH, Jette AM, Anderson J, et al. Routine, single-item screening to identify abusive relationships in women. *J Fam Pract* 2000; 49:1017–1022.
23. Thompson CF, Atkins D. *Screening for Family Violence.* Washington, DC: US Preventive Services Task Force; 1996.
24. Wathen CN, MacMillan HL. Interventions for violence against women: scientific review. *JAMA* 2003; 289:589–600; e581–e510.
25. Ramsay J, Richardson J, Carter Y, Davidson L, Feder G. Should health professionals screen women for domestic violence? Systematic review. *BMJ* 2002; 325:314–318.
26. *Age Charts for Periodic Health Examination.* Reprint 510. Kansas City, KS: American Academy of Family Physicians; 1994.
27. Holbrook JH, Ende J, eds. Primary care internal medicine. In: *Medical Knowledge Self-Assessment Program 11.* Philadelphia: American College of Physicians; 1998:21–22.
28. Flitcraft A, Hadley S, Hendricks-Matthews MK, McLeer SV, Warshaw C.. *Diagnostic and Treatment Guidelines on Domestic Violence.* Chicago, Ill: American Medical Association; 1992.
29. Dunn L, Brown C, Dickerson V, et al. *The Obstetrician-Gynecologist and Primary-Preventive Health Care.* Washington, DC: American College of Obstetricians and Gynecologists; 1993.
30. Psychosocial Risk Factors: Perinatal Screening and Intervention. Educational Bulletin 255. Washington, DC: American College of Obstetricians and Gynecologists; 1999.
31. McFarlane J, Christoffel K, Bateman L, et al. Assessing for abuse: self-report vs. nurse interview. *Public Health Nurs* 1991; 4:245–250.
32. Canterino JC, Vanham LG, Harrigan JT, et al. Domestic abuse in pregnancy: a comparison of self completed domestic abuse questionnaire with directed interview. *Am J Obstet Gynecol* 1999; 181:1049–1051.
33. Joint Commission on Accreditation of Healthcare Organizations. *Hospital Manual.* Standard PE1.9. Chicago, Ill: Joint Commission Resources, Inc; 2002.
34. Glass N, Dearwater S, Campbell J. Intimate partner violence screening and intervention: data from eleven Pennsylvania and California community hospital emergency departments. *J Emerg Nurs* 2001; 27:141–149.
35. Thompson RS, Rivara FP, Thompson DC, et al. Identification and management of domestic violence, a randomized trial. *Am J Prev Med* 2000; 19:253–263.
36. Harwell TS, Casten RJ, Armstrong KA, et al. Results of a domestic violence training program offered to staff of urban community health centers. *Am J Prev Med* 1998; 15:235–242.
37. Larkin GL, Rolniak S, Hyman KB, et al. Effects of an administrative intervention on rates of screening for domestic violence in an urban emergency department. *Am J Public Health* 2000; 90:1444–1448.
38. Sherin KM, Sinacore JM, Li X, et al. HITS: a short domestic violence screening tool for use in a family practice setting. *Fam Med* 1998; 30:508–512.
39. Brown JB, Lent B, Brett PJ, et al. Development of the woman abuse screening tool for use in family practice. *Fam Med* 1996; 28:422–428.
40. Fogarty CT, Brown JB. Screening for abuse in Spanish-speaking women. *J Am Board Fam Pract* 2002; 15:101–111.
41. Coker AL, Pope BO, Smith PH, et al. Assessment of clinical partner violence screening tools. *J Am Med Womens Assoc* 2001; 56:19–23.
42. Straus MA. Measuring intrafamily conflict and violence: the conflicts tactics scale. *J Marriage Fam* 1979; 4:75–88.
43. Hudson WW, McIntosh SR. The assessment of spouse abuse: two quantifiable dimensions. *J Marriage Fam* 1981; 43:873–888.
44. Campbell JC. Nursing assessment for risk of homicide with battered women. *ANS Adv Nurs Sci* 1986; 8:36.
45. Elliot BA, Johnson MMP. Domestic violence in primary care setting: patterns and prevalence. *Arch Fam Med* 1995; 4:113–119.
46. Holt VL, Kernic MA, Lumley T, Wolf ME, Rivara FP. Civil protection orders and risk of subsequent police reported violence. *JAMA* 2002; 288:589–594.
47. Gerbert B, Caspers N, Milliken N, et al. Interventions that help victims of domestic violence: a qualitative analysis of physicians' experiences. *J Fam Pract* 2000; 49:889–895.
48. Straus HE, Rydman RJ, Roberts RR, et al. A three months prospective outcomes study of recently abused women. *Acad Emerg Med* 2001; 8(5):461.
49. Muelleman RL, Feighny KM. Injury prevention: effects of an emergency department-based advocacy program for battered women on community resource utilization. *Ann Emerg Med* 1999; 33:62–66.
50. Sullivan CM, Campbell R, Angelique H, et al. An advocacy intervention program for women with abusive partners: six month follow up. *Am J Comm Psychol* 1994; 22:101–122.