Published in final edited form as:

Am J Prev Med. 2009 May ; 36(5): 439–445.e4. doi:10.1016/j.amepre.2009.01.024.

Intimate Partner Violence Screening Tools

Rebecca F. Rabin, MD, MHS^{1,2}, Jacky M. Jennings, PhD, MPH^{3,4}, Jacquelyn C. Campbell, PhD, RN⁵, and Megan H. Bair-Merritt, MD, MSCE³

¹ University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania ² Department of Pediatrics Residency Program, Johns Hopkins School of Medicine, Baltimore, Maryland ³ Division of General Pediatrics and Adolescent Medicine, Johns Hopkins School of Medicine, Baltimore, Maryland ⁴ Department of Epidemiology, Johns Hopkins School of Public Health, Baltimore, Maryland ⁵ Johns Hopkins School of Nursing, The Johns Hopkins University, Baltimore, Maryland

Abstract

Context—Intimate partner violence (IPV) screening remains controversial. Major medical organizations mandate screening, whereas the U.S. Preventive Services Task Force (USPSTF) cautions that there is insufficient evidence to recommend for or against screening. An effective IPV screening program must include a screening tool with sound psychometric properties. A systematic review was conducted to summarize IPV screening tools tested in healthcare settings, providing a discussion of existing psychometric data and an assessment of study quality.

Evidence acquisition—From the end of 2007 through 2008, three published literature databases were searched from their start through December 2007; this search was augmented with a bibliography search and expert consultation. Eligible studies included English-language publications describing the psychometric testing of an IPV screening tool in a healthcare setting. Study quality was judged using USPSTF criteria for diagnostic studies.

Evidence synthesis—Of 210 potentially eligible studies, 33 met inclusion criteria. The most studied tools were the Hurt, Insult, Threaten, and Scream (HITS, sensitivity 30%–100%, specificity 86%–99%); the Woman Abuse Screening Tool (WAST, sensitivity 47%, specificity 96%); the Partner Violence Screen (PVS, sensitivity 35%–71%, specificity 80%–94%); and the Abuse Assessment Screen (AAS, sensitivity 93%–94%, specificity 55%–99%). Internal reliability (HITS, WAST); test–retest reliability (AAS); concurrent validity (HITS, WAST); discriminant validity (WAST); and predictive validity (PVS) were also assessed. Overall study quality was fair to good.

Conclusions—No single IPV screening tool had well-established psychometric properties. Even the most common tools were evaluated in only a small number of studies. Sensitivities and specificities varied widely within and between screening tools. Further testing and validation are critically needed.

Address correspondence and reprint requests to: Megan H. Bair-Merritt, MD, MSCE, 200 North Wolfe Street, Office 2021, Johns Hopkins School of Medicine, Division of General Pediatrics, Baltimore MD 21287. E-mail: E-mail: mbairme1@jhmi.edu.

No financial disclosures were reported by the authors of this paper.

Publisher's Disclaimer: This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Context

Intimate partner violence (IPV) is a major public health problem associated with adverse health consequences for victims.^{1–3} Healthcare settings represent important sites for IPV screening and intervention. In 2004, however, the U.S. Preventive Services Task Force (USPSTF) concluded that there was “insufficient evidence to recommend for or against routine screening of women for IPV.”⁴ This recommendation reflects limited empirical data about the potential negative impacts of screening and about effective interventions that decrease IPV. Conducting rigorous research is critical to determine the potential negative impacts of screening and to establish effective interventions. In order to conduct this research, however, investigators need psychometrically sound IPV screening tools.

Clinicians also should be aware of the psychometric properties of empirically tested IPV screening tools. Despite the USPSTF recommendation, most major medical organizations (including the American Medical Association [AMA], the American Academy of Pediatrics [AAP], the American Academy of Family Physicians, the American College of Obstetricians and Gynecologists, and the American College of Emergency Physicians) recommend routine IPV screening as a part of standard patient care.^{5–8} With their recommendation for routine IPV screening, leaders of the AMA and the AAP acknowledged that the state of the art for measuring behavioral-health outcomes is relatively undeveloped, but they cautioned that waiting for empirical evidence of improved outcomes jeopardizes the health of millions of victims.⁸

Within the past 5 years, researchers have developed and tested a wide variety of IPV screening tools. Comprehensive reviews of IPV screening tools, however, are limited, and there has been no synthesis of the psychometric data from existing tools.^{9–11} In 2002, Fogarty et al.⁹ summarized IPV screening tools, based on a search of studies published between 1966 and 2001; much of the extant research was published subsequent to their review. Additionally, the CDC recently conducted a systematic review and published a compilation of IPV screening instruments for healthcare providers.¹² The CDC publication included a table of published and unpublished screening tools, and it contained the instruments themselves. Neither the reviews to date, nor the CDC publication, however, discussed the strength of the published psychometric data or evaluated study quality. Therefore, the current review was designed to accomplish these objectives through systematically summarizing IPV screening tools tested in healthcare settings.

Evidence Acquisition

Study Eligibility Criteria

For the current review, IPV was defined as physical, sexual, or emotional abuse or battering (including fear and coercive control) between intimate partners. For inclusion, studies had to (1) determine the psychometric properties of IPV screening questions; (2) test the IPV screening tool in a medical setting such as internal medicine, family practice, obstetrics–gynecology, the emergency department, or pediatrics; (3) be written in English, and (4) be published in a peer-reviewed journal. The IPV screening questions could be part of a larger screening questionnaire provided that the authors tested and reported the psychometric properties of the IPV questions specifically.

Studies focusing on the following subjects were excluded: (1) elder abuse or child abuse; (2) IPV perpetration; (3) assessment of different screening methods (such as verbal versus written); (4) IPV prevalence; and (5) IPV severity or frequency using longer, established tools intended for research (including the Conflict Tactics Scale [CTS], the Index of Spousal Abuse [ISA], the Composite Abuse Scale [CAS], and the Abuse Behavior Inventory [ABI]).

Data Sources

Three published literature databases (MEDLINE via PubMed, CINAHL Plus, and PsycINFO) were searched from their start through December 2007. The following search terms were used: *domestic violence* or *intimate partner violence* or *spouse abuse* or *battered women* and *questionnaires* or *measure* or *instrument* or *screening*. The names of identified screening questionnaires (such as the Abuse Assessment Screen [AAS]) also were used as search terms. The reference sections of all included studies and related review articles were searched for potentially relevant articles.

Study Selection and Data Extraction

Data extraction and synthesis were conducted from the end of 2007 through 2008. The initial literature search yielded a total of 2420 articles in PubMed, 1218 articles in CINAHL Plus, and 868 articles in PsycINFO. Eight additional articles were located through the IPV screening tool name-based searches. Titles of articles were reviewed to screen for eligibility and duplication among online databases. Because the initial search was purposefully broad, many titles reflected studies that were not relevant. Abstracts of the articles were examined if eligibility was not evident from the title alone.

After completing the initial screen for eligible articles and eliminating duplicates across databases, 210 potentially eligible articles remained. These articles were then abstracted using a pre-specified form to record relevant study content and to determine whether the study met inclusion criteria. Final review narrowed the initial set of 210 articles down to 33 articles^{13–45} that met all the inclusion criteria. Reasons for exclusion are detailed in Figure 1.

The quality of each of the remaining 33 articles was evaluated based on a 14-point scale developed for this systematic review. Items on the quality scale were derived from standards used by the USPSTF for diagnostic studies and from previously published work^{46,47} evaluating the quality of observational studies. Specifically, the following USPSTF criteria for evaluating the internal validity of diagnostic accuracy studies were applied: credible reference standard (CTS, ISA, CAS, ABI) performed regardless of screening test results; spectrum of IPV risk for participants; and sample size. Three additional factors also were considered: (1) external validity/generalizability (including number of study sites, and provision of demographic and SES data); (2) study description of consenting versus nonconsenting patients; and (3) appropriate description and conduct of statistics. Inter-reviewer agreement was high overall (Pearson correlation $r=0.77$). Papers with scores of 13–14 were considered excellent, 10–12 good, 7–9 fair, and ≤ 6 poor.

Evidence Synthesis

Common IPV Screening Tools

The most studied IPV screening tools were the Hurt, Insult, Threaten, and Scream (HITS),^{13–15,24,43} the Woman Abuse Screening Tool/Woman Abuse Screening Tool-Short Form (WAST/WAST-SF),^{15–17,25,26,44} the Partner Violence Screen (PVS),^{22–26,44} and the AAS.^{30,35–37} These screening instruments are summarized in Table 1, which includes the specific questions and scoring for each screening tool, demographics of the populations on whom the screening tool has been tested, and a summary of the screening tools' psychometric properties.

The HITS—Initial development and testing of the four-item HITS involved family physicians and family practice offices, although the screening tool since has been evaluated in diverse outpatient settings. Two^{24,43} of the five studies^{13–15,24,43} investigating the psychometric properties of the HITS enrolled men, and one investigated a Spanish-language version.¹³ Four

studies^{13,14,24,43} tested the sensitivity and specificity of the HITS. The range of sensitivities varied widely depending on population, with sensitivities lower in men than women. Internal reliability and concurrent validity also were tested and found to be acceptable.^{13–15,43}

The WAST/WAST-SF—Like the HITS, the eight-item WAST was originally developed for family physicians, but subsequently it has been tested in the emergency department. The WAST has been evaluated in Spanish-speaking patients.¹⁷ A two-item short-form version uses the first two questions, which ask general relationship questions as opposed to specific questions about violence. Only one study tested the sensitivity and specificity of the eight-item WAST; 44 two studies tested the WAST-SF in combination with other screens and/or physical signs; 25,26 and one study compared the eight-item version to the short form.¹⁷ Two studies^{16,17} found that the WAST has good internal reliability. One study¹⁶ documented acceptable concurrent validity, and one study¹⁷ found that the WAST differentiated abused and non-abused women.

The PVS—The three-item PVS was developed as a brief instrument for the emergency department. The authors conducted the primary development and testing of the tool exclusively with women, although Mills et al.²⁴ later tested the instrument with men. Three studies^{22, 24,44} assessed the sensitivity and specificity of the PVS, reporting a wide range of sensitivities. Two additional studies^{25,26} examined the sensitivity and specificity of an “augmented” PVS. Houry et al.²³ established the predictive validity of the PVS plus three additional questions. The authors found that women positive for IPV on the initial augmented PVS were 11 times more likely to report having experienced physical abuse at a 4-month follow-up assessment than women who were negative on the initial screen.

The AAS—The five-item AAS was created to detect abuse perpetrated against pregnant women. The screening tool has been tested predominantly with young, poor women. Two^{36, 37} of four studies^{30,35–37} evaluating the AAS enrolled women in countries other than the U.S. (Brazil and Sri Lanka). Two studies^{30,37} calculated the sensitivity and specificity of the complete AAS; a third³⁶ evaluated the sensitivity and specificity of the pregnancy question only. Test retest reliability was acceptable in one study.³⁷

Overall Summary of Included Studies

See Appendix A, available online at www.ajpm-online.net, for a summary of the content and quality of the 33 included studies.^{13–45} The 33 articles evaluated a total of 21 IPV screening tools. This number reflects the fact that some sets of IPV screening questions were tested in multiple papers. For example, five papers studied the psychometric properties of the HITS.^{13–15,24,43}

Study Quality

The majority of studies were categorized as either fair (15) or good (14). Two studies were rated as excellent, and two were rated as poor.

Screening Tool Content

Of the 21 IPV screening tools, 16 made an assessment of physical violence and five did not (Women’s Experiences with Battering [WEB]¹⁸; one-item screening tool by Peralta et al.²⁰; SAFE-T³¹; two-item screening tool by Webster et al.³⁹; and five-item screening tool by Zink et al.⁴²). Seventy-one percent (15/21) of screening tools assessed threats or fear. Only approximately half (11/21) asked respondents about emotional abuse. Finally, just one third (7/21) included items about sexual abuse.

The time period about which screening tools inquired ranged from *current* to *ever*. For example, the Ongoing Violence Assessment Tool and the Ongoing Abuse Screen asked about abuse at *the present time* or *presently*, whereas the HITS asked about the past 12 months. Some screening tools, such as the WAST, asked patients if they have *ever* been abused.

Screening Tool Length

Of the 21 sets of IPV questions, the mean number of items was 4.2 (range 1–11, SD=2.8), with only four (WEB, WAST, Partner Abuse Interview, and the PVS plus three additional questions of Houry et al.²³) containing more than five questions.^{18,21,23} Four screening tools used a single item to screen for IPV.^{20,38,40,45} The single items performed inconsistently in their ability to identify IPV victims.

Screening Men for IPV

Two studies^{24,43} tested IPV screening tools with exclusively male populations. Shakil et al.⁴³ determined that the HITS had acceptable sensitivity (88%) and specificity (97%) in men recruited from an ambulatory care clinic, an HIV clinic, and an emergency department. In contrast, Mills et al.²⁴ found significantly lower sensitivities of the HITS (30%–46%) and the PVS (35%–46%) in a population of predominantly African-American men.

Comments

Authors of a 1968 WHO report, *The Principles and Practice of Screening for Disease*, commented that “in theory, screening is an admirable method of combating disease...in practice, there are snags.”⁴⁸ The current review highlights a number of “snags” that preclude drawing definitive conclusions about the effectiveness of IPV screening tools tested in healthcare settings. First, even the most *common* screening tools (the HITS, the WAST, the PVS, and the AAS) were evaluated in only a small number of studies (three to six) in healthcare settings. Consequently, all of the included IPV screening tools need additional reliability and validity testing. For example, test retest reliability of the HITS, the WAST, and the PVS has not been studied. No studies reported the internal reliability of the PVS. One study documented the discriminant validity of the WAST, but further validation in other populations would be helpful.

Second, there is a lack of consensus about the most appropriate comparison measure for testing the sensitivity and specificity of IPV screening tools. Traditionally, sensitivity and specificity are determined by comparing a screening test to a gold standard. Because of the complexity of IPV, no gold standard exists, and decisions about the most appropriate comparison measure are conceptually difficult. However, the lack of consensus about the most appropriate comparison measure limits synthesizing data across multiple studies and determining the value of any one IPV screening tool.

Finally, in part because of the variability in comparison measures, each of the four screening tools tested in three or more papers (the HITS, the WAST, the PVS, and the AAS) had sensitivities and specificities that varied widely. For example, the sensitivities of the PVS ranged from 35% to 71%. A reported sensitivity of 35% is concerning because most screening tests maximize sensitivity to avoid missing affected patients; maximum sensitivity should be the goal for IPV screening tools also.

In addition to having sound psychometric properties, IPV screening tools used in healthcare settings ideally should be brief, comprehensive, and tested in diverse populations. Of the most studied IPV screening tools, the three-item PVS is the shortest, and the eight-item WAST is

longest. The HITS has a scoring system that may take several minutes to calculate. Thus, the HITS and the WAST may be difficult to implement in a busy clinical practice.

Individual providers must determine the optimal balance between brevity and comprehensiveness. Inquiring about different forms of abuse may be important for a number of reasons. First, emotional abuse often precedes physical abuse, so detection of emotional abuse allows for early intervention.⁵⁰ Second, sexually abused women are at higher risk for adverse health outcomes than physically or emotionally abused women.⁵⁰ Finally, some abusive relationships involve only threats and coercive control tactics.¹⁸

The WAST and the AAS conceptualized IPV most broadly, including physical, emotional, and sexual violence as well as threats/fear. The AAS, however, was the only screening tool that asked specifically about abuse during pregnancy and therefore potentially represents an important screening tool for obstetric populations. The HITS included questions about physical abuse, emotional abuse, and threats, but excluded sexual abuse. The PVS used a narrower underlying definition of IPV, asking only about physical violence and safety.

Two papers^{24,43} tested the PVS and/or the HITS exclusively on men. Recent literature documents that rates of female-perpetrated violence are high, and the screening of men for victimization has increased.^{51,52} It is unclear whether IPV screening tools, such as the PVS, that were originally designed to screen women are the most appropriate tools for men. The etiology of violence may be different in situations in which women are violent.⁵³ If this is the case, then screening questions likewise may need to be adjusted. Also, given social desirability bias, male patients may respond to brief IPV screening questions differently than female patients. Continued study in this area is clearly warranted.

The findings of this review should be interpreted in light of several limitations. First, despite attempts to conduct a systematic search, it is possible that relevant papers were missed. Searching multiple databases and bibliographies and seeking expert opinion likely minimized exclusion of eligible papers.

Second, determining paper eligibility and assessing study quality are inherently subject to bias. In order to address this potential bias, eligibility and study quality were determined independently by two reviewers, and disagreements were handled through consensus with a third reviewer. Third, IPV screening tools tested in mental health settings were excluded because these settings were felt to be qualitatively different from other healthcare settings. Separate reviews of IPV screening tools used in mental health settings would be helpful.

Intimate partner violence is a prevalent public health problem requiring urgent attention from researchers and clinicians. Both clinical practice and research are hindered by the lack of comprehensive evaluation of the psychometric properties of existing IPV screening tools. Many of the current screening tools are promising, but further testing and validation in diverse populations using a universally accepted comparison measure is critically needed.

Acknowledgments

Dr. Megan Bair-Merritt had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis. She is funded by a Career Development Award (K23HD057180) sponsored by the National Institute of Child Health and Human Development.

References

1. Tjaden, P.; Thoennes, N. National Institute of Justice, CDC: Research in Brief. 1998. Prevalence, incidence, and consequences of violence against women: findings from the National Violence Against Women Survey; p. 1-15.

2. Campbell JC, Lewandowski L. Mental and physical health effects of intimate partner violence on women and children. *Psychiatr Clin North Am* 1997;20(2):353–74. [PubMed: 9196919]
3. Coker AL, Davis KE, Arias I, Desai S, Sanderson M, Brandt HM. Physical and mental health effects of intimate partner violence for men and women. *Am J Prev Med* 2002;23(4):260–8. [PubMed: 12406480]
4. US Preventive Services Task Force. Screening for family and intimate partner violence. *Ann Intern Med* 2004;140(5):382–6. [PubMed: 14996680]
5. American Academy of Family Physicians. Family violence and abuse. www.aafp.org/x16506.xml
6. American College of Obstetrics and Gynecology. Violence against women: screening tools. www.acog.org/departments/dept_notice.cfm?recno=17&bulletin=585
7. American College of Emergency Physicians. Domestic family violence. www.acep.org/practres.aspx?id=29184
8. Nelson J, Johnston C. Screening for family and intimate partner violence. *Ann Intern Med* 2004;141(1):81. [PubMed: 15238385]
9. Fogarty CT, Burge S, McCord EC. Communicating with patients about intimate partner violence: screening and interviewing approaches. *Fam Med* 2002;34(5):369–75. [PubMed: 12038719]
10. Anglin D, Sachs C. Preventive care in the emergency department: screening for domestic violence in the emergency department. *Acad Emerg Med* 2003;10(10):1118–27. [PubMed: 14525748]
11. Chuang C, Liebschutz JM. Screening for intimate partner violence in the primary care setting: a critical review. *JCOM* 2002;9(10):565–71.
12. Basile, KC.; Hertz, MF.; Back, SE. Intimate partner violence and sexual violence victimization assessment instruments for use in health care settings: Version 1. Atlanta GA: CDC, National Center for Injury Prevention and Control; 2007. www.cdc.gov/NCIPC/pub-res/ipv_and_sv_screening.htm
13. Chen PH, Rovi S, Vega M, Jacobs A, Johnson MS. Screening for domestic violence in a predominantly Hispanic clinical setting. *Fam Pract* 2005;22(6):617–23. [PubMed: 16055473]
14. 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. [PubMed: 9669164]
15. Chen PH, Rovi S, Washington J, et al. Randomized comparison of 3 methods to screen for domestic violence in family practice. *Ann Fam Med* 2007;5(5):430–5. [PubMed: 17893385]
16. 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. [PubMed: 11052161]
17. Fogarty CT, Brown JB. Screening for abuse in Spanish-speaking women. *J Am Board Fam Pract* 2002;15(2):101–11. [PubMed: 12002193]
18. Coker AL, Pope BO, Smith PH, Sanderson M, Hussey JR. Assessment of clinical partner violence screening tools. *J Am Med Womens Assoc* 2001;56(1):19–23. [PubMed: 11202067]
19. Sohail H, Eldridge S, Feder G. The sensitivity and specificity of four questions (HARK) to identify intimate partner violence: a diagnostic accuracy study in general practice. *BMC Fam Pract* 2007;8:49. [PubMed: 17727730]
20. Peralta RL, Fleming MF. Screening for intimate partner violence in a primary care setting: the validity of “feeling safe at home” and prevalence results. *J Am Board Fam Pract* 2003;16(6):525–32. [PubMed: 14963079]
21. Pan HS, Ehrensaf M, Heyman RE, O’Leary KD, Schwartz R. Evaluating domestic partner abuse in a family practice clinic. *Fam Med* 1997;29(7):492–5. [PubMed: 9232411]
22. Feldhaus KM, Kozol-McLain J, Amsbury HL, Norton IM, Lowenstein SR, Abbott JT. Accuracy of 3 brief screening questions for detecting partner violence in the emergency department. *JAMA* 1997;277(17):1357–61. [PubMed: 9134940]
23. Houry D, Feldhaus K, Peery B, et al. A positive domestic violence screen predicts future domestic violence. *J Interper Violence* 2004;19(9):955–66.
24. Mills TJ, Avegno J, Haydel MJ. Male victims of partner violence: prevalence and accuracy of screening tools. *J Emerg Med* 2006;19(2):117–24.
25. Halpern LR, Susarla S, Dodson TB. Injury location and screening questionnaires as markers for intimate partner violence. *J Oral Maxillofac Surg* 2005;63(9):1255–61.

26. Halpern LR, Perciaccante VJ, Hayes C, Susarla S, Dodson TB. A protocol to diagnose intimate partner violence in the emergency department. *J Trauma* 2006;60(5):1101–5. [PubMed: 16688077]
27. Paranjape A, Liebschutz J. STaT: a three-question screen for intimate partner violence. *J Womens Health* 2003;12(3):233–9.
28. Paranjape A, Rask K, Liebschutz J. Utility of STaT for the identification of recent intimate partner violence. *J Natl Med Assoc* 2006;98(10):1663–9. [PubMed: 17052059]
29. Ernst AA, Weiss SJ, Cham E, Marquez M. Comparison of three instruments for assessing ongoing intimate partner violence. *Med Sci Monit* 2002;8(3):CR197–201. [PubMed: 11887036]
30. Weiss SJ, Ernst AA, Cham E, Nick TG. Development of a screen for ongoing intimate partner violence. *Violence Vict* 2003;18(2):131–41. [PubMed: 12816400]
31. Fulfer JL, Tyler JJ, Choi NJ, et al. Using indirect questions to detect intimate partner violence: the SAFE-T questionnaire. *J Interper Violence* 2007;18(3):295–309.
32. Ernst AA, Weiss S, Cham E, Hall L, Nick TG. Detecting ongoing intimate partner violence in the emergency department using a simple 4-question screen: the OVAT. *Violence Vict* 2004;19(3):375–84. [PubMed: 15631287]
33. Heron SL, Thompson M, Jackson E, Kaslow NJ. Do responses to an intimate partner violence screen predict scores on a comprehensive measure of intimate partner violence in low-income black women? *Ann Emerg Med* 2003;42(4):483–91. [PubMed: 14520319]
34. 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. [PubMed: 7500563]
35. Norton LB, Peipert J, Zierler S, Lima B, Hume L. Battering in pregnancy: an assessment of two screening methods. *Obstet Gynecol* 1995;85(3):321–5. [PubMed: 7862365]
36. Reichenheim ME, Moraes C. Comparison between the abuse assessment screen and the revised conflict tactics scales for measuring physical violence during pregnancy. *J Epidemiol Commun Health* 2004;58(6):523–7.
37. Moonesinghe LN, Rajapaksa LC, Samarasinghe G. Development of a screening instrument to detect physical abuse and its use in a cohort of pregnant women in Sri Lanka. *Asia Pac J Public Health* 2004;16(2):138–44. [PubMed: 15624793]
38. 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. [PubMed: 11093568]
39. Webster J, Holt V. Screening for partner violence: direct questioning or self-report? *Obstet Gynecol* 2004;103(2):299–303. [PubMed: 14754699]
40. Sagrestano LM, Rodriguez AC, Carroll D, et al. A comparison of standardized measures of psychosocial variables with single-item screening measures used in an urban obstetric clinic. *J Obstet Gynecol Neonatal Nurs* 2002;31(2):147–55.
41. Dubowitz H, Prescott L, Feigelman S, Lane W, Kim J. Screening for intimate partner violence in a pediatric primary care clinic. *Pediatrics* 2008;121(1):e85–e91. [PubMed: 18166548]
42. Zink T, Levin L, Putnam F, Beckstrom A. Accuracy of five domestic violence screening questions with nongraphic language. *Clin Pediatrics* 2007;46(2):127–34.
43. Shakil A, Donald S, Sinacore JM, Krepcho M. Validation of the HITS domestic violence screening tool with males. *Fam Med* 2005;37(3):193–8. [PubMed: 15739135]
44. MacMillan HL, Wathen C, Jamieson E, et al. Approaches to screening for intimate partner violence in health care settings: a randomized trial. *JAMA* 2006;296(5):530–6. [PubMed: 16882959]
45. McIntyre LM, Butterfield MI, Nanda K, et al. Validation of a trauma questionnaire in veteran women. *J Gen Intern Med* 1999;14(3):186–9. [PubMed: 10203625]
46. Harris RP, Helfand M, Woolf SH, et al. Current methods of the U.S. Preventive Services Task Force: a review of the process. *Am J Prev Med* 2001;20:21–35. [PubMed: 11306229]
47. Bhutta AT, Cleves M, Casey PH, Cradock MM, Anand KJS. Cognitive and behavioral outcomes of school-age children who were born preterm. *JAMA* 2002;288:728–37. [PubMed: 12169077]
48. Wilson, JMG.; Jungner, G. Principles and practice of screening for disease.
www.who.int/bulletin/volumes/86/4/07-050112BP.pdf

49. Coker AL, Flerx VC, Smith PH, Whitaker DJ, Fadden MK, Williams M. Intimate partner violence incidence and continuation in a primary care screening program. *Am J Epidemiol* 2007;165:821–7. [PubMed: 17255117]
50. Bonomi AE, Anderson ML, Rivara FP, Thompson RS. Health outcomes in women with physical and sexual intimate partner violence exposure. *J Womens Health* 2007;16:987–97.
51. Whitaker D, Haileyesus T, Swahn M, Saltzmann L. Differences in frequency of violence and reported injury between relationships with reciprocal and nonreciprocal intimate partner violence. *Am J Pub Health* 2007;97:941–7. [PubMed: 17395835]
52. Carbone-Lopez K, Kruttschnitt C, MacMillan R. Patterns of intimate partner violence and their associations with physical health, psychological distress, and substance use. *Public Health Reports* 2006;121:382–92. [PubMed: 16827439]
53. Johnson M. Patriarchal terrorism and common couple violence: two forms of violence against women. *J Marr Fam* 1995;57:283–94.

Figure 1.
Reasons for exclusion of articles

Common IPV screening tools

Am J Prev Med. Author manuscript; available in PMC 2010 May 1.

Screener name and questions	Scoring	Clinical settings and populations	Sensitivity and specificity	Additional psychometric testing
<p>6 Has your partner ever abused you physically?</p> <p>7 Has your partner ever abused you emotionally?</p> <p>8 Has your partner ever abused you sexually?</p>				
<p>PVS^{22–26,44}</p> <p>1 Have you been hit, kicked, punched, or otherwise hurt by someone in the past year? If so, by whom?</p> <p>2 Do you feel safe in your current relationship?</p> <p>3 Is there a partner from a previous relationship who is making you feel unsafe now?</p>	Positive response to any question denotes abuse	Women and men with a range of ethnicities and SES	Sensitivity and compared to the CTS, ISA, and CAS ^{22,24,44} : Sensitivity: 35%–71% Specificity: 80%–94% PVS plus injury location compared to self-report of IPV ²⁵ : Sensitivity: 79% Specificity: 80% One additional study by the same authors tested sensitivity and specificity of the WAST-SF plus the PVS plus injury location ²⁶	Predictive validity ²³ : Women positive for IPV at baseline on PVS significantly more likely than IPV negative women to continue to be IPV positive after 4 months
<p>AAS^{30,35–37}</p> <p>1 Have you ever been emotionally or physically abused by your partner or someone important to you?</p> <p>2 Within the last year, have you been hit, slapped, kicked, or otherwise physically hurt by someone? If yes, by whom? How many times?</p> <p>3 Since you have been pregnant, have you been hit, slapped, kicked, or</p>	Positive response to any question denotes abuse	Tested in obstetrics–gynecology outpatient practices Women with a range of ethnicities, but most commonly tested in populations of low-income, uninsured women Tested internationally in Brazil and Sri Lanka	Compared to the provider interview and the ISA ^{30,37} : Sensitivity: 93%–94% Specificity: 55%–99% Only one question of the AAS compared to the CTS (minor and severe subscales) ³⁷ : Sensitivity: 32%–61% Specificity: 98%–99%	Cronbach's α ³⁰ = 0.56 Test–retest reliability ³⁷ : 0.91 Increased relative risk of abuse with AAS compared to provider interview ³⁵

Screener name and questions	Scoring	Clinical settings and populations	Sensitivity and specificity	Additional psychometric testing
<p>otherwise physically hurt by someone? If yes, by whom? How many times and where?</p> <p>4 In the last year, has anyone forced you to have sexual activities? If so, whom? How many times?</p> <p>5 Are you afraid of your partner or anyone you listed above?</p>				

Note: HITS reprinted with permission from Kevin Sherin, MD, MPH (Kevin_Sherin@doh.state.fl.us). Copyright 2003. There is a \$25 fee for copyright. WAST reprinted from Brown JB, Lent B, Brett PJ, Sas G, Pederson LL. Development of the Woman Abuse Screening Tool for use in family practice. Fam Med 1996; 28(6):422–8 with permission from the Society of Teachers of Family Medicine (www.stfm.org). Copyright 1996.

AAS, Abuse Assessment Screen, CAS, Composite Abuse Scale; CTS, Conflict Tactics Scale; HITS, Hurt, Insult, Threaten, and Scream; IPV, Intimate Partner Violence; ISA, Index of Spousal Abuse; PVS, Partner Violence Screen; Woman Abuse Screening Tool, WAST; Woman Abuse Screening Tool-Short Form, WAST-SF