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Screening for Intimate Partner Violence, Elder Abuse, and Abuse of Vulnerable Adults

Evidence Report and Systematic Review for the US Preventive Services Task Force

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IMPORTANCE Intimate partner violence (IPV), elder abuse, and abuse of vulnerable adults are common and result in adverse health outcomes.

OBJECTIVE To review the evidence on screening and interventions for IPV, elder abuse, and abuse of vulnerable adults to inform the US Preventive Services Task Force.

DATA SOURCES MEDLINE, Cochrane Library, EMBASE, and trial registries through October 4, 2017; references; experts; literature surveillance through August 1, 2018.

STUDY SELECTION English-language randomized clinical trials (RCTs), studies evaluating test accuracy, and cohort studies with a concurrent control group assessing harms.

DATA EXTRACTION AND SYNTHESIS Dual review of titles and abstracts, full-text articles, and study quality; qualitative synthesis of findings. Data were not pooled, primarily because of heterogeneity of populations, interventions, and outcomes.

MAIN OUTCOMES AND MEASURES Abuse or neglect, morbidity caused by abuse, test accuracy, and harms.

RESULTS Thirty studies were included (N = 14 959). Three RCTs (n = 3759) compared IPV screening with no screening; none found significant improvements in outcomes (eg, IPV or quality of life) over 3 to 18 months and 2 (n = 935) reported no harms of screening. Nine studies assessed tools to detect any past-year or current IPV in women; for past-year IPV (5 studies [n = 6331]), sensitivity of 5 tools ranged from 65% to 87% and specificity ranged from 80% to 95%. The accuracy of 5 tools (4 studies [n = 1795]) for detecting current abuse varied widely; sensitivity ranged from 46% to 94% and specificity ranged from 38% to 95%. Eleven RCTs (n = 6740) evaluated interventions for women with screen-detected IPV. Two enrolling pregnant women (n = 575) found significantly less IPV among women in the intervention group: 1 home visiting intervention (standardized mean difference [SMD], −0.34 [95% CI, −0.59 to −0.08]) and 1 behavioral counseling intervention for multiple risks (IPV, smoking, depression, tobacco exposure) (SMD, −0.40 [95% CI, −0.68 to −0.12]). No studies evaluated screening or interventions for elder abuse or abuse of vulnerable adults. One study assessing a screening tool for elder abuse had poor accuracy (sensitivity, 46% and specificity, 73% for detecting physical or verbal abuse).

CONCLUSIONS AND RELEVANCE Although available screening tools may reasonably identify women experiencing IPV, trials of IPV screening in adult women did not show a reduction in IPV or improvement in quality of life over 3 to 18 months. Limited evidence suggested that home visiting and behavioral counseling interventions that address multiple risk factors may lead to reduced IPV among pregnant or postpartum women. No studies assessed screening or treatment for elder abuse and abuse of vulnerable adults.

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Supplemental content

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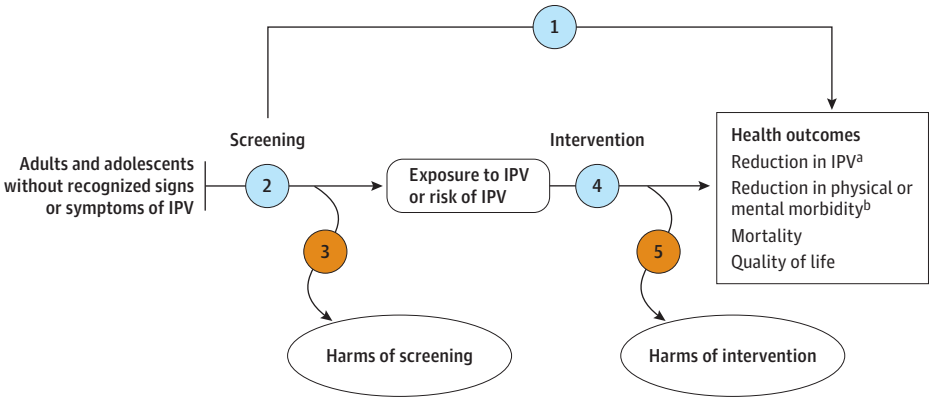
Figure 1. Analytic Framework: Screening for Intimate Partner Violence



Key questions

1. Does screening for current, past, or increased risk for intimate partner violence (IPV) in adults and adolescents reduce exposure to IPV, physical or mental morbidity, or mortality?
2. What is the accuracy of screening questionnaires or tools for identifying adults and adolescents with current, past, or increased risk for IPV?
3. What are the harms of screening for IPV in adults and adolescents?
4. How well do interventions reduce exposure to IPV, physical or mental morbidity, or mortality among screen-detected adults and adolescents with current, past, or increased risk for IPV?
5. What are the harms of interventions for IPV in adults and adolescents?

Evidence reviews for the US Preventive Services Task Force (USPSTF) use an analytic framework to visually display the key questions that the review will address to allow the USPSTF to evaluate the effectiveness and harms of a preventive service. The questions are depicted by linkages that relate interventions and outcomes. Refer to the USPSTF procedure manual for further details.[8] IPV indicates intimate partner violence.

[a] Includes reduction in the frequency or severity of IPV.

[b] Includes acute and chronic morbidity from physical abuse (eg, fractures, dislocations, brain injury), sexual abuse (eg, unwanted pregnancy, sexually transmitted infections), psychological abuse (eg, depression, anxiety, posttraumatic stress disorder), and financial abuse (eg, limiting access to money or other resources); health care utilization attributed to any form of abuse/neglect and associated physical and mental morbidity (eg, rates of emergency department visits); adverse perinatal outcomes (eg, miscarriage, low birth weight); social isolation.

Intimate partner violence (IPV), elder abuse, and abuse of vulnerable adults can cause acute and long-term adverse physical and mental health as well as adverse social consequences (eg, homelessness).[1] IPV refers to physical or sexual violence, psychological aggression, or stalking by a person with whom one has a close personal relationship,[2] such as a spouse. The 2015 National Intimate Partner and Sexual Violence Survey (N = 10 081) estimated that 5.4% of women and 5.1% of men experienced any past-year contact sexual violence, physical violence, and/or stalking.[3] Elder abuse refers to an intentional act or failure to act by a caregiver or another person in a relationship involving an expectation of trust that causes or creates a serious risk of harm to an older adult[4]; similar criteria apply to abuse of vulnerable adults (those with impaired ability to perform normal activities of daily living or to provide for their own care because of physical or mental disability).[5] In a 2008 nationwide telephone survey of older adults (N = 5777), 10% of respondents reported past-year emotional, physical, or sexual mistreatment or potential neglect.[6]

Routine screening of people without signs or symptoms of abuse could identify abuse not otherwise disclosed and provide opportunities for intervention that may reduce future abuse as well as short- and long-term adverse health consequences. In 2013, the US Preventive Services Task Force (USPSTF) recommended screening women of childbearing age for IPV but concluded that the evidence was insufficient for older or vulnerable adults.[7] To inform an updated recommendation, the evidence on the benefits and harms of screening asymptomatic adults for IPV, elder abuse, and abuse of vulnerable adults in populations and settings relevant to US primary care was reviewed.

Methods

Scope of the Review

Detailed methods are available in the full evidence report at http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/intimate-partner-violence-and-abuse-of-elderly-and-vulnerable-adults-screening1. **Figure 1** shows the analytic framework and key questions (KQs) for IPV that guided the review; a similar figure for elder abuse and abuse of vulnerable adults is provided as eFigure 1 in the Supplement.

Data Sources and Searches

PubMed/MEDLINE, the Cochrane Library, and EMBASE were searched for English-language articles from 2011 through October 4, 2017 (eMethods in the Supplement). Studies published before 2011 were identified from the prior systematic reviews for the USPSTF.[9,10] For IPV screening and treatment in men and adolescents (not included in the prior reviews), searches were conducted from database inception through October 4, 2017. ClinicalTrials.gov, the National Institutes of Health Research Portfolio Online Report Tools, and the World Health Organization International Clinical Trials Registry Platform were also searched. To supplement searches, investigators reviewed reference lists

of pertinent articles and studies suggested by reviewers. Since October 2017, ongoing surveillance was conducted through article alerts and targeted searches of journals to identify major studies published in the interim that may affect the conclusions or understanding of the evidence and the related USPSTF recommendation. The last surveillance was conducted on August 1, 2018.

Study Selection

Two investigators independently reviewed titles, abstracts, and full-text articles using prespecified eligibility criteria (eTable 1 in the Supplement). English-language studies conducted in countries categorized as "very high" on the United Nations Human Development Index were included. Only studies rated as good or fair quality were included.

Randomized clinical trials (RCTs) comparing screened groups with unscreened groups were eligible for KQ1 (direct evidence that screening improves health outcomes). Eligible outcomes for KQ1 included abuse or neglect victimization, health outcomes, health care utilization attributed to abuse, quality of life, and mortality.

Studies assessing the accuracy of tools designed to detect current, past, or risk of abuse were eligible for KQ2 (screening test accuracy). Only studies that compared a screening tool with an acceptable reference standard, such as the Conflicts Tactics Scale (CTS), were eligible.

RCTs and cohort studies with a concurrent control group comparing screened groups with unscreened groups were eligible for KQ3 (harms of screening). Eligible harm outcomes included labeling, stigma, false-positive results, increased abuse and retaliation, and others.

RCTs assessing interventions that could be offered in primary care or referred to by primary care were eligible for KQ4 (benefits of interventions) and KQ5 (harms of intervention). RCTs comparing intervention groups with no treatment, usual care, attention control, or waitlist control were eligible. Cohort studies with a concurrent control group were also eligible for KQ5 (harms of interventions).

Data Extraction and Quality Assessment

For each included study, 1 investigator extracted information about populations, tests or interventions, comparators, outcomes, settings, and designs, and a second investigator reviewed for completeness and accuracy. Two independent investigators assessed the quality of each study as good, fair, or poor using predefined criteria developed by the USPSTF and adapted for this topic (eMethods in the Supplement).[11] Individual study quality ratings are provided in eTables 2 through 11 in the Supplement.

Data Synthesis and Analysis

Findings for each question were summarized in tables, figures, and narrative format. For KQ4 (benefits of IPV interventions), studies reported on similar outcomes (eg, incident IPV) using both continuous and dichotomous measures. To create figures displaying commonly reported outcomes, the results were reexpressed as a standardized mean difference when sufficient data were available. Statistical significance was assumed when 95% CIs did not cross the null. All testing was 2-sided. Meta-analysis was not performed because we identified few trials focused on heterogeneous populations, intervention types, and outcomes.

The overall strength of the body of evidence was assessed for each KQ as high, moderate, low, or insufficient using methods developed for the USPSTF (and the Evidence-based Practice program), based on the overall quality of studies, consistency of results between studies, precision of findings, and risk of reporting bias.[8] The applicability of the findings to US primary care populations and settings was also assessed.

Results

A total of 30 studies (34 articles) with 14 959 participants were included (**Figure 2**). Because of the paucity of eligible studies on elder abuse and abuse of vulnerable adults, this literature is not organized by KQ but is briefly described at the end of this section.

Benefits of Screening for IPV

Key Question 1. Does screening for current, past, or increased risk for IPV in adults and adolescents reduce exposure to IPV, physical or mental morbidity, or mortality?

Three RCTs (n = 3759) compared universal screening for IPV in a health care setting with no screening (**Table 1**); of these, 1 (n = 2708) enrolled women from 10 US primary care clinics,[12] 1 (n = 344) enrolled participants from a single New Zealand emergency department,[14] and 1 (n = 707) enrolled participants from a variety of Canadian clinical settings.[15] All studies enrolled adult women only (mean ages, 34-40 years); prevalence of past-year IPV ranged from 12% to 18% across studies. Responses to positive screening results in the intervention group included brief counseling and referral.

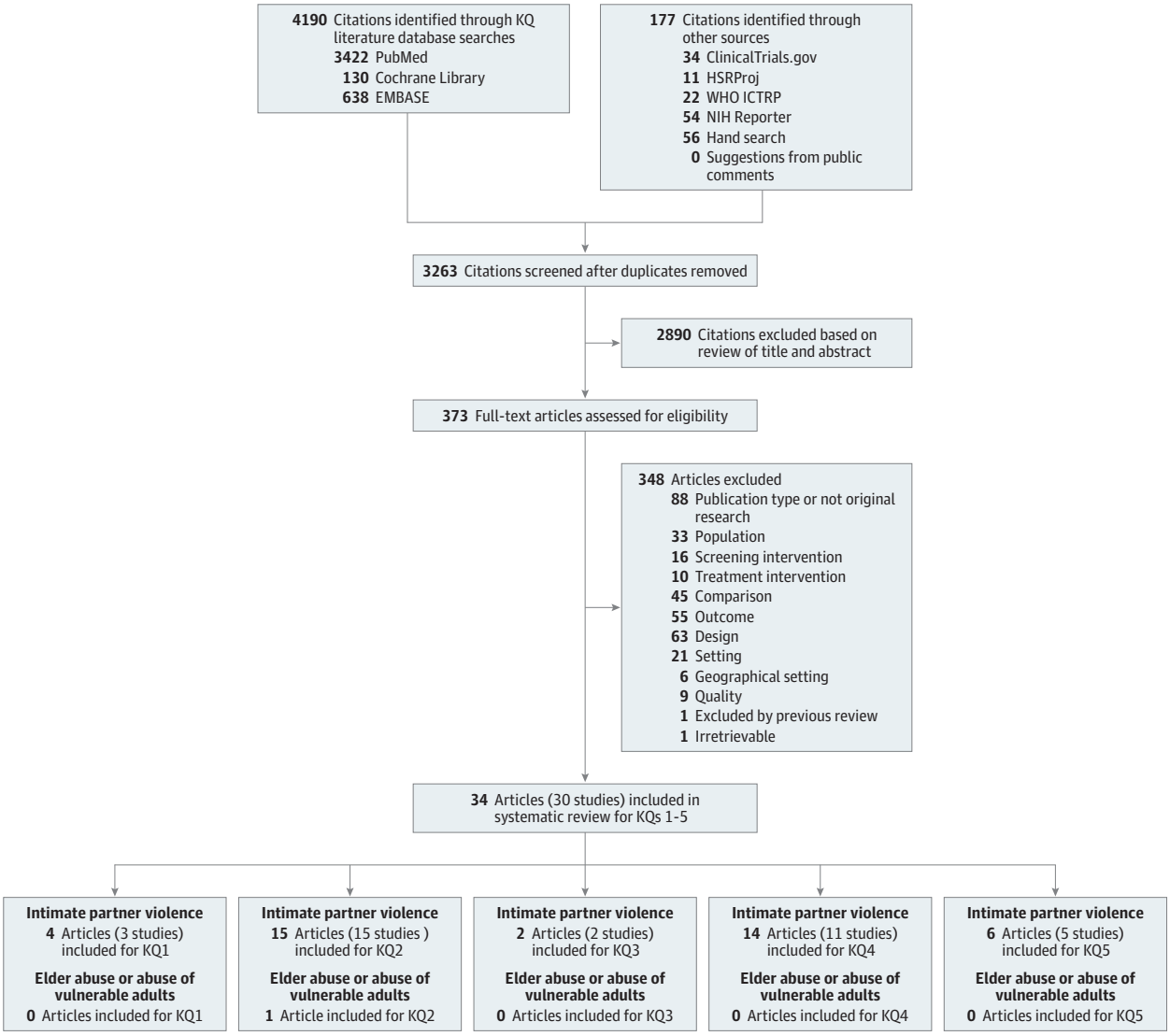
Overall, consistent evidence from 3 RCTs found no benefit of screening adult women for IPV followed by brief counseling or referral (eTable 12 in the Supplement). No study found a significant reduction in IPV among the screened group compared with a nonscreened control group (**Figure 3**).[12-15] Two RCTs (n = 3415) measured quality of life and found similar scores between groups (eFigure 2 in the Supplement)[12,15]; one of these (n = 707) found no significant association between the intervention and improved posttraumatic stress disorder symptoms[15] (eFigure 2 in the Supplement).

Accuracy of Screening for IPV

Key Question 2. What is the accuracy of screening questionnaires or tools for identifying adults and adolescents with current, past, or increased risk for IPV?

Fifteen studies (n = 4460) assessed the accuracy of 12 IPV screening tools (**Table 2**).[16-30] Studies used the following validated reference standards to establish screening test accuracy: Composite Abuse Scale, CTS or CTS-2, and Index of Spousal Abuse. One study[25] used a semistructured interview as the reference standard to determine the presence of IPV. All studies enrolled adults, and most enrolled only women or a majority of women; 1 study (n = 53) included only men.[24] None focused on pregnant women; only 2 (n = 5717) reported on the percentage of women who were pregnant (8%-9%).[16,28] Recruitment settings varied across studies (Table 2): emergency departments,[18,19,24,25,29] primary care,[16,17,27,30] urgent care,[26] mixed settings,[23,28] and telephone or mail surveys.[20-22] All but 3 studies[23,27,28] were conducted in the United States. The prevalence of current or recent IPV ranged from 11% to 29%, with a median of 24%.

Figure 2. Literature Search Flow Diagram: Screening for Intimate Partner Violence



Reasons for exclusion: Publication type/not original research: Publication was not original research and did not include any original data. Population: Study was not conducted in an included population. Screening intervention: Screening intervention was out of scope. Treatment intervention: Treatment intervention was out of scope. Comparison: Study did not use an included comparator. Outcome: Study did not report eligible outcomes. Design: Study did not use an included design. Setting: Study was not conducted in, recruited from, or feasible for primary care. Geographical setting: Study was not conducted in a country categorized as Very High on the 2014 Human Development Index (as defined by the United Nations Development Program). Quality: Study was poor quality. HSRProj indicates Health Services Research Projects in Progress; KQ, key question; NIH, National Institutes of Health; WHO ICTRP, World Health Organization International Clinical Trials Registry Platform.

Included studies assessed 12 different screening tools (eTable 13 in the Supplement shows copies of the tools). Most assessed a tool designed to identify persons experiencing past-year IPV; however, 5 studies (n = 1908) reported on the accuracy for identifying current (ongoing) abuse,[16,18,26,29,30] 1 (n = 75) assessed the accuracy of detecting lifetime abuse,[31] and 1 (n = 409) assessed the accuracy for predicting future IPV (3-5 months).[22]

Accuracy of Detecting Past-Year or Current IPV

Only studies that enrolled women and reported on accuracy of a tool designed to detect past-year or current overall IPV (not subtypes of abuse only) are described below; results for all tools are provided in eTable 14 in the Supplement.

Five studies (n = 6331) reported on accuracy of a tool for detecting past-year IPV: Humiliation, Afraid, Rape, Kick (HARK); Hurt, Insulted, Threaten, Scream (HITS); E-HITS (an extended version of the HITS, with an additional item assessing sexual abuse); Parent Screening Questionnaire; Partner Violence Screen (PVS); and Woman Abuse Screening Tool (WAST). Across all screeners, sensitivity ranged from 65% to 87% and specificity from 80% to 95% (**Figure 4**). Most were assessed by only 1 study; the HITS was assessed in 2 studies enrolling women veterans, 1 of which also evaluated the E-HITS.

Table 1. Intimate Partner Violence Key Question 1: Characteristics of Included Randomized Clinical Trials

Source (Quality)	Description of Screening Intervention	Description of Comparisons	Recruitment Setting, Country	Source Population	Age, Mean (SD) [Range]	No. (%)	
						Nonwhite	With Past-Year IPV
Klevens et al,[12,13] 2012 (Good)	Computerized screening (3-item PVS); women with a positive response to ≥1 questions were shown a brief video providing support, given information about a hospital-based IPV advocacy program, and encouraged to seek help; they were also given a printout with resources (eg, 24-h hotlines, women's shelters)	IPV resource list (no screening, all women received an IPV resource list) Control group: No screening, no IPV resource list	10 primary health care clinics, United States	Women ≥18 y seeking clinical services who could be separated from a partner or child >3 y (n = 2708)	38.7 (14.9) [NR]	2554 (94.6)	346 (15)[a]
Koziol-McLain et al,[14] 2010 (Fair)	In-person screening (3-item PVS screen conducted by a research assistant); if ≥1 positive response, women received a brief statement about the unacceptability of violence, were asked additional safety questions, and received information about referral options Women with a positive response to safety questions had additional services in emergency department[b,c]	Usual care (no formal emergency department IPV screening policy)	1 emergency department, New Zealand	Women ≥16 y presenting to emergency department for care; 19% of included sample were presenting for an acute injury (n = 344)	Median, 40 (IQR, 27-59) [16-94]	158 (39.6)[d]	36 (18) [lifetime prevalence, 102 {51}]
MacMillan et al,[15] 2009 (Fair)	In-person screening (8-item WAST) before clinic visit, clinician notification of women who screened positive; all women were given a card that listed contact information of local agencies and hotlines for women exposed to violence[e]	No screening before visit (screening completed after the clinic visit); women received the same resource card as the screening group	12 primary care sites; 11 emergency departments; and 3 obstetrics/gynecology clinics, Canada	Women aged 18-64 y who had a male partner within the last year and could be separated from those accompanying them (n = 707)	34 (NR) [18-64]	NR	707 of 5681 screened (12)

Abbreviations: IPV, intimate partner violence; IQR, interquartile range; NR, not reported; PVS, Partner Violence Screen; WAST, Woman Abuse Screening Tool.

[a] Prevalence refers to the year before enrollment and was based on by self-report 1 year after enrollment among women who completed the follow-up interview (n = 2364). Measured using 18 questions from the National Violence Against Women survey.

[b] Estimate based on a questionnaire descrbed by authors as a compilation of the Partner Violence Screen and Abuse Assessment Screen and asks about current (past-year) abuse. Considered positive if 1 of 3 questions was answered positively.

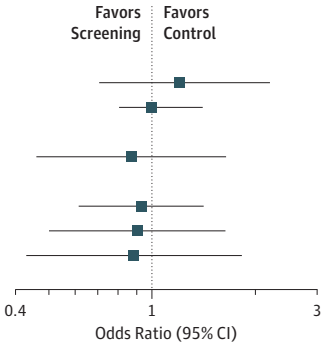
[c] Women who screened positive were asked questions about personal danger or children or elderly persons in the home who are in danger. If questions indicated a safety concern, the emergency department provider was notified and a referral was made to the hospital social worker or community specialist.

[d] Refers to the percentage who were Maori or non–New Zealand European.

[e] The completed screening questionnaire was placed in the chart. Any discussion of the positive finding was left to the discretion of the treating clinician.

Figure 3. Benefit of IPV Screening Interventions for Reducing IPV Exposure (Key Question 1)

IPV Measure	Follow-up, mo	Comparison	No. With IPV/ Total (%)	Odds Ratio (95% CI)
Klevens et al,[12] 2012 (primary care)				
NVAW ≥1	12	Usual care	152/1807 (8.4)	1.20 (0.70-2.20)
NVAW ≥1	12	Resource list	165/1802 (9.2)	1.00 (0.80-1.40)
Koziol-McLain et al,[14] 2010 (emergency department)				
CAS ≥7	3	Usual care	26/344 (7.6)	0.87 (0.46-1.64)
MacMillan et al,[15] 2009 (mixed)				
CAS ≥7	6	Resource list	123/707 (17.4)	0.93 (0.61-1.41)
CAS ≥7	12	Resource list	109/707 (15.4)	0.90 (0.50-1.63)
CAS ≥7	18	Resource list	99/707 (14.0)	0.88 (0.43-1.82)



CAS indicates Composite Abuse Scale (30 items); IPV, intimate partner violence; NVAW, National Violence Against Women Survey (18 items).

Accuracy estimates for the HITS and E-HITS were consistent but imprecise: sensitivity ranged from 75% to 78% and specificity from 80% to 83% (Figure 4). The largest study (n = 5605) evaluated the WAST and reported a sensitivity of 87% (95% CI, 85%-90%) and specificity of 89% (95% CI, 88%-90%) in a population of women from a variety of clinical settings.[28]

Four studies (n = 1795) reported on the accuracy of 5 tools in identifying ongoing or current relationship violence: Abuse Assessment Screen (AAS); Ongoing Abuse Screen (OAS); Ongoing Violence Assessment Tool (OVAT); Slapped, Things Threatened (STaT); and an unnamed tool.[18,26,29,30] As shown in Figure 4, accuracy varied widely; sensitivity ranged from 46% to 94% and specificity from 38% to 95%. Only 1 tool, the OVAT, had a sensitivity and specificity greater than 80%.

Harms of Screening for IPV

Key Question 3. What are the harms of screening for IPV in adults and adolescents?

Two RCTs reported on harms of screening.[14,15] Both were included in KQ1; detailed results are reported in eTable 15 in the Supplement. The RCT enrolling women from various Canadian health care settings[15] actively monitored harms of screening using the Consequences of Screening Tool (COST), which includes an 8-item Effects on Quality of Life subscale.[32] The COST was administered to a subset of 591 women (of 3271 screened) within 14 days of screening. Mean scores were similar among women who screened positive and negative for abuse, with no significant differences, and reflected no harms associated with screening (mean scores ranged from 3.3 to 3.7 across groups [range, 16 to −16, with negative scores reflecting harm]). The second RCT (n = 344) stated that participants, clinicians, or research staff reported no adverse events; however, it is not clear whether adverse events were prespecified or how they were monitored.[14]

Effectiveness of Interventions

Key Question 4. How well do interventions reduce exposure to IPV, physical or mental morbidity, or mortality among screen-detected adults and adolescents with current, past, or increased risk for IPV?

Eleven RCTs (n = 6740) evaluated an intervention for women with screen-detected IPV or who were considered at risk for IPV, 5 (n = 1959) enrolled women during the perinatal period,[31,33-38] and 6 (n = 5712) enrolled nonpregnant women (**Table 3**).[39-45] All but 3 RCTs were conducted in the United States: 1 in Australia[39] and 2 in Hong Kong.[37,44,45] Studies assessed heterogeneous interventions (details of components are shown in eTable 16 in the Supplement). Outcomes measured included IPV, quality of life, depression, and anxiety (eTables 17 and 18 in the Supplement).

Benefits of Interventions Among Pregnant and Postpartum Women

Two RCTs (n = 882) assessed the benefit of multiple home visits during the perinatal period, conducted either by paraprofessionals or trained nonprofessionals, focused on empowerment, support, and linkages to needed services.[33,36] One (n = 239) found a statistically significant reduction in IPV at follow-up (SMD, −0.34 [95% CI, −0.59 to −0.08]) (**Figure 5**).[36]

Three RCTs evaluated brief clinic-based counseling (ranging from 1-8 sessions across studies) and found mixed results (Figure 5).[31,34,37,38] A 1-session brief counseling intervention (n = 110) was associated with lower rates of psychological abuse (SMD, −0.39 [95% CI, −0.78 to −0.01]) and minor physical violence (SMD, −0.47 [95% CI, −0.86 to −0.09]) and with mixed results for quality of life (significant improvement in some 36-Item Short Form Health Survey subdomains, no difference in others, and statistically significantly worse scores for bodily pain).[37] One RCT assessing a behavioral counseling intervention for women with 1 or more risk factors (IPV, depression, smoking, environmental tobacco exposure) for adverse pregnancy outcomes reported on outcomes among the subgroup who had IPV at baseline (n = 306); women in the intervention group had fewer recurrent episodes of IPV during pregnancy and postpartum (adjusted odds ratio, 0.48 [95% CI, 0.29 to 0.80])[31] and fewer very preterm neonates (≤33 weeks) (2 vs 9 women; $P = .03$); there was no statistically significant difference between groups in rates of low-birth-weight neonates (<2500 g), very-low-birth-weight neonates (<1500 g), or rates of preterm birth (<37 weeks).[34] One study (n = 54) of interpersonal psychotherapy (4 sessions) was not associated with significant improvement in any outcome.[38]

Benefits of Interventions Among Nonpregnant Women

Six RCTs (n = 5712) enrolled populations for whom perinatal status was not an inclusion criterion; all assessed brief counseling interventions (Table 3).[39-43,45] Results are shown in **Figure 6**. All reported on IPV, and 4 (n = 5308) found no significant difference between groups in

Table 2. Intimate Partner Violence Key Question 2: Characteristics of Included Studies

Source (Quality)	Screener	Timing of IPV Exposure	Recruitment Setting, Country	Population	Age, Mean (SD), y	No. (%)	
						Women	Nonwhite
Chen et al,[16] 2005 (Fair)	HITS	Current	Family practice clinics, United States	Women ≥18 y, predominantly Hispanic, currently involved with a partner (n = 113)[a]	36 (NR)	113 (100)	72 (64)
Dubowitz et al,[17] 2007 (Fair)	PSQ	Past year	Pediatric primary care clinic, United States	English-speaking adult caregivers with a child <6 y seen for a well-child visit (n = 200)	Median, 24	188 (94) (mothers)	NR
Ernst et al,[18] 2004 (Fair)	OVAT	Current	Emergency department, United States	English-speaking patients (n = 306)	34 (10)	212 (70)	156 (51)
Feldhaus et al,[19] 1997 (Fair)	PVS	Past year	Emergency department, United States	English-speaking women ≥18 y who were noncritical (n = 255 [ISA]; n=230 [CTS])	36 (16)	Unclear (100)	177 (55)
Iverson et al,[20] 2013 (Fair)	HITS	Past year	Mailed survey, United States	Female veterans ≥18 y found through VHA database who reported an intimate relationship in past year (n = 160)	48 (NR)	160 (100)	32 (20)
Iverson et al,[21] 2015 (Fair)	HITS E-HITS	Past year	Mailed survey, United States	Female veterans ≥18 y found through VHA database who reported an intimate relationship within the past year (n = 80)	49 (NR)	80 (100)	11 (14)
Koziol-McLain et al,[22] 2001 (Fair)	BRFSS (violence screen)	Prediction of future (3-5 mo) partner abuse	Mailed survey, United States	English-speaking women ≥18 y (n = 409)	46 (16)[b]	409 (100)	37 (9)
MacMillan et al,[23] 2006 (Fair)	PVS WAST	Past year	2 family practices, 2 emergency departments, and 2 women's health clinics, Canada	English-speaking (and reading) women aged 18-64 y presenting for their own health care visit not too ill to participate (overall n unclear; 2339 completed the reference standard CAS)	37 (12)	2339 (100)	NR
Mills et al,[24] 2006 (Fair)	HITS PVS	Past year	Emergency department, United States	Men ≥18 y triaged to the medical or trauma sections (n = 53)	40 (11)[c]	0	43 (78)
Paranjape et al,[25] 2003 (Fair)	STaT	Lifetime	Emergency department, United States	English-speaking women aged 18-64 y from the nonacute section (n = 75)	36 (10)	75 (100)	50 (66)
Paranjape et al,[26] 2006 (Fair)	STaT	Current or most recent relationship	Urgent care, United States	English-speaking women aged 18-65 y (n = 240)	38 (10)	240 (100)	219 (>91[d])
Sohal et al,[27] 2007 (Fair)	HARK	Past year	General practice waiting rooms, United Kingdom	Women ≥17 y who had been in an intimate relationship in the last year (n = 232)	35 (NR)[e]	232 (100)	93 (60)
Wathen et al,[28] 2008 (Fair)	WAST	Past year	Primary, acute, and specialty care centers, Canada	English-speaking (and reading) women aged 18-64 y with a male partner in the last year (n = 5604)[f]	Overall, NR Screen group, 39 (NR)	5604 (100)	NR
Weiss et al,[29] 2003 (Fair)	OAS AAS	Current	Emergency department, United States	Patients with a current partner who were not too ill to participate (trauma, drug overdose, alcohol intoxication, or other condition) (n = 856)	36 (NR)	531 (62)	419 (49)
Zink et al,[30] 2007 (Fair)	Unnamed[g]	Current	Pediatric and family medicine clinics, United States	English-speaking mothers in a relationship with a steady partner for ≥1 y and ≥1 child aged 3-12 y (n = 393)	Median, 31[h]	393 (100)	199 (51)

Abbreviations: AAS, Abuse Assessment Screen; BRFSS, Behavioral Risk Factor Surveillance System; CAS, Composite Abuse Scale; CTS, Conflict Tactics Scale; E-HITS, Extended HITS; HARK, Humiliation, Afraid, Rape, Kick; HITS, Hurt, Insult, Threaten, Scream; E-HITS, Extended HITS; IPV, intimate partner violence; ISA, Index of Spouse Abuse; NR, not reported; OAS, Ongoing Abuse Screen; OVAT, Ongoing Violence Assessment Tool; PSQ, Parent Screening Questionnaire; PVS, Partner Violence Screen; STaT, Slapped, Things, Threaten; VHA, Veterans Health Administration; WAST, Woman Abuse Screening Tool.

[a] Nine percent of participants reported a current pregnancy.

[b] Age range, 18 to 93 years.

[c] Age range, 20 to 62 years.

[d] Only African American reported.

[e] Age range, 18 to 70 years.

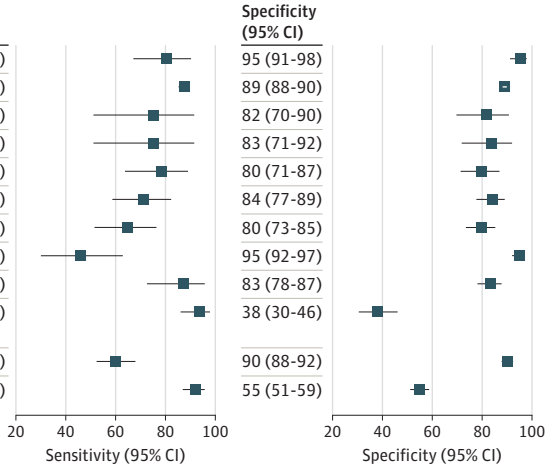
[f] Overall percentage of pregnancy was not reported. Eight percent of participants reported current pregnancy in the screened group.

[g] Five-item unnamed screener designed to assess relationship quality and safety using nongraphic language.

[h] Age range, 18 to 58 years.

Figure 4. Accuracy of Screening Tools for Detecting Past-Year or Current IPV Exposure in Women (Key Question 2)

Source	Setting	No. of Participants	Tool	Exposure	Reference	Sensitivity (95% CI)	Specificity (95% CI)
Sohal et al,[27] 2007	Primary care	232	HARK	Past year	CAS	80 (67-90)	95 (91-98)
Wathen et al,[28] 2008	Mixed	5604	WAST	Past year	CAS	87 (85-90)	89 (88-90)
Iverson et al,[21] 2015	VA	80	E-HITS	Past year	CTS-2	75 (51-91)	82 (70-90)
	VA	80	HITS	Past year	CTS-2	75 (51-91)	83 (71-92)
Iverson et al,[20] 2013	VA	160	HITS	Past year	CTS-2	78 (64-89)	80 (71-87)
Feldhaus et al,[19] 1997	ED	230	PVS	Past year	CTS	71 (59-82)	84 (77-89)
	ED	255	PVS	Past year	ISA	65 (51-76)	80 (73-85)
Zink et al,[30] 2007	Primary care	393	Not named	Current	CTS-2	46 (30-63)	95 (92-97)
Ernst et al,[18] 2004	ED	306	OVAT	Current	ISA	87 (73-96)	83 (78-87)
Paranjape et al,[26] 2006	Urgent care	240	STaT	Current/ recent	ISA	94 (86-98)	38 (30-46)
Weiss et al,[29] 2003	ED	856	OAS	Current	ISA	60 (52-68)	90 (88-92)
	ED	856	AAS	Current	ISA	92 (87-96)	55 (51-59)



AAS indicates Abuse Assessment Screen; CAS, Composite Abuse Scale; CTS, Conflict Tactics Scale; CTS-2, Conflict Tactics Scale 2; E-HITS, Extended HITS; ED, emergency department; HARK, Humiliation, Afraid, Rape, Kick; HITS, Hurt, Insulted, Threaten, Scream; ISA, Index of Spouse Abuse; OAS, Ongoing Abuse Screen; OVAT, Ongoing Violence Assessment Tool; PVS, Partner Violence Screen; STaT, Slapped, Things, Threaten; VA, Veterans Administration; WAST, Woman Abuse Screening Tool.

rates of overall IPV[39,42] or combined physical and sexual violence[40,41]; measures of IPV were either similar between groups or slightly higher in the intervention group. One RCT (n = 200) reported on subtypes of violence only and found benefit for psychological aggression but not for physical assault or sexual coercion.[45] Two RCTs (n = 475) measured quality of life; both found similar scores among the intervention and control groups, and differences were not statistically significant.[39,45] Three RCTs (n = 676) reported on depression outcomes; 2 (n = 472) found benefit in favor of the intervention group (although 1 found a difference below the threshold considered clinically meaningful)[39,45] and 1 (n = 204) found similar scores between groups.[43] One RCT (n = 272) found no difference between groups in the percentage of women who had anxiety at 6 and 12 months.[39]

RCTs of IPV interventions were limited by high overall attrition (20% or higher in 7 of 11 RCTs), potential measurement bias (eg, recall bias or variation in comfort with self-reported measures of violence frequency), and heterogeneity in outcome reporting (particularly for IPV outcomes). Usual care and use of a co-intervention (eg, provision of an IPV resource sheet) in control groups varied across studies and sometimes was not described. In the behavioral counseling intervention targeting multiple risk factors (smoking, environmental tobacco smoke exposure, depression, and IPV),[31,34] improvement in birth outcomes among women reporting IPV at baseline may not be attributable to IPV counseling. In the subgroup of women reporting IPV at baseline, 62% reported being depressed, and those randomized to the intervention were also offered counseling for depression (in addition to IPV)[31]; the improvement in outcomes may be attributable to counseling for depression as opposed to IPV counseling.

Harms of Interventions

Key Question 5. What are the harms of interventions for IPV in adults and adolescents?

Five RCTs (n = 1413) assessing interventions for IPV reported on harms (Table 3)[36,37,39,42,45]; all are included in KQ4. One RCT[39] (n = 272) assessing brief counseling surveyed women at 6 and 12 months about potential harms of study participation (eg, whether they felt negatively judged by practice staff based on being a participant, whether their partner abuse had increased as a result of participation); there was no difference between groups in reported harms, and authors concluded that no harms were associated with the intervention. In 1 RCT (n = 110),[37] set in a prenatal clinic in Hong Kong, women were asked whether violence frequency had increased with study participation; no adverse events related to participation were reported by women in either group.[37] Three other RCTs (n = 1031) reported that no harms were associated with the intervention but did not comment on how harms were measured and assessed.[36,42,45]

Benefits of Screening for Elder Abuse and Abuse of Vulnerable Adults

No studies of elder abuse or abuse of vulnerable adults were found pertinent to KQs 1, 3, 4, and 5, and only 1 study of elder abuse was found relevant to KQ2. One study (n = 139) assessing the accuracy of screening for elder abuse among individuals 65 years or older presenting for routine dental care was included.[46] Eligible participants received caregiver assistance and scored 18 or more on the Mini Mental Status Examination. Screening was conducted using the 15-item Hwalek-Sengstock Elder Abuse Screening Test (H-S/EAST) and compared against the CTS. The enrolled population had a relatively high prevalence of elder maltreatment based on CTS violence or verbal aggression scales (41%). Compared with the CTS (violence and verbal aggression scales combined), the H-S/EAST tool had a sensitivity of 46% (95% CI, 32% to 59%) and specificity of 73% (95% CI, 62% to 82%) for detecting elder abuse.

Discussion

A summary of the evidence for IPV is provided in **Table 4**. Consistent evidence from 3 RCTs (n = 3759) found no benefit of screening adult

Table 3. Intimate Partner Violence Key Question 4: Characteristics of Included Randomized Clinical Trials

Source (Quality)	Intervention	Control	Recruitment Setting, Country	Population	Age, Mean (SD), y	No. (%)	
						Female	Nonwhite
Pregnant/Postpartum							
Bair-Merrit et al,[33] 2010 (Fair)	Home visits from paraprofessionals over 3 y; direct services related to parenting, conflict resolution, emotional support; linking families to community services, including IPV shelters and advocacy groups[a]	Usual care	Hawaiian hospitals, United States	Mothers ≥18 y who gave birth between 1994-1995 on Oahu to children rated as at high risk for maltreatment (n = 643)	NR	643 (100)	568 (88)
El-Mohandes et al,[31] 2008 Kiely et al,[34] 2010 El-Mohandes et al,[35] 2011 (Fair)	Counseling delivered during prenatal visits (4-8 sessions) and postpartum visits (2 sessions) aimed at reducing behavioral risks (depression, IPV, smoking, and tobacco exposure[b]	Usual care	6 prenatal care sites in the District of Columbia, United States	African American women ≥18 y (≤28 wk gestation) who screened positive for depression, IPV, smoking, or tobacco exposure (n = 913)	25 (SE, 0.2)	913 (100)	913 (100)
DOVE Sharps et al,[36] 2016 (Fair)	IPV empowerment intervention embedded into a home visiting program; 3 sessions (15-25 min) during pregnancy and 3 postpartum sessions during home visits	Standard home-visiting protocol[c]	Urban and rural perinatal home-visiting programs, United States	Women ≥14 y (≤32 wk gestation), low income (ie, Medicaid eligible) enrolled in a home visiting program; screened positive for IPV (n = 239)	24.0 (5.2)	239 (100)	137 (57)
Tiwari et al,[37] 2005 (Fair)	Counseling (1 session [30 min] delivered by midwife counselor) focused on empowerment and advocacy), followed by brochure reinforcing information	Usual care (wallet-sized card with community resources for abused women)	Public antenatal clinic, Hong Kong	Women <30 wk gestation who screened positive for abuse by a partner during their first antenatal appointment (n = 110)	28 (NR)	110 (100)	NR
Zlotnick et al,[38] 2011 (Fair)	Counseling (based on interpersonal psychotherapy); 4 sessions (60 min) during pregnancy and 1 session within 2 wk of delivery	Control (educational materials and list of IPV resources)	Primary care and obstetrics/gynecology clinics, United States	Women aged 18-40 y who screened positive for past-year IPV (n = 54)	23.8 (4.6)	54 (100)	33 (61)
Nonpregnant							
Hegarty et al,[39] 2013 (Fair)	Brief IPV counseling intervention (1-6 sessions, depending on needs)	Usual care	Family practice clinics in Victoria, Australia	Women aged 16-50 y who screened positive for fear of their partner in the past 12 mo (n = 272 [52 physicians])[d]	38 (8)	272 (100)	NR
Miller et al,[40] 2011 (Fair)	Counseling and education for IPV or reproductive coercion and assistance contacting resources (1 session during clinic visit)	Usual care[e]	4 family planning clinics in Northern California, United States	Women aged 16-29 y who agreed to a follow-up interview (n = 904 [4 clinics])	16-20 y: 44% 21-24 y: 33% 25-29 y: 24%	904 (100)	698 (77)
Miller et al,[41] 2016 (Fair)	Counseling and education for IPV and supported referrals to victims' services (1 session during clinic visit)	Usual care[f]	25 family planning clinics in Western Pennsylvania, United States	Women aged 16-29 y who agreed to a follow-up interview (n = 3540 [17 clinics])	16-20 y: 38% 21-24 y: 36% 25-29 y: 27%	3540 (100)	736 (19)
Rhodes et al,[42] 2015 (Fair)	Brief motivational intervention, manual-guided (1 session during emergency department visit, telephone booster 10 d later)	Assessed control No contact control	2 affiliated urban academic emergency departments in Philadelphia (Pennsylvania), United States	Women aged 18-64 y who screened positive for IPV and heavy drinking (n = 592)	32 (NR)	592 (100)	484 (82)
Saftlas et al,[43] 2014 (Fair)	Motivational interviewing (1 in-person session [60 min] at baseline; 3 telephone sessions [10-15 min] 1, 2, and 4 mo later)	Provision of written materials; referral to community-based resources on request	2 family planning clinics in rural Iowa, United States	Women ≥18 y who screened positive for past-year IPV (n = 204)	NR	204 (100)	24 (12)
Tiwari et al,[44] 2012 Tiwari et al,[45] 2010 (Good)	Counseling (1 in-person session focused on advocacy), 12 weekly telephone calls, 24-h access to a hotline for additional support	Usual community care	Community center, Hong Kong	Women ≥18 y who screened positive for IPV (n = 200)	38 (7) NR	200 (100)	200 (100)

Abbreviations: DOVE, Domestic Violence Enhanced Home Visitation Program; IPV, intimate partner violence; KQ, key question; NR, not reported; SE, standard error.

[a] Over the course of the intervention, 13.6 weekly visits occurred in year 1 (on average), tapering to 25% participation by year 3.

[b] Each session focused on the specific risk factors identified during prenatal screening (not IPV alone)

[c] Standard care includes assessment and referral for IPV during first home visit; during subsequent visits, discussion of perinatal IPV only if indication or if woman raises a concern.

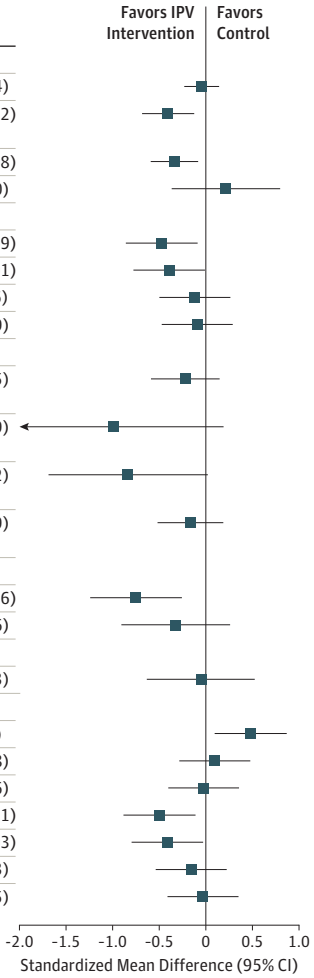
[d] Eligible physicians (for training) included those who worked 3 or more sessions per week, those who used electronic records, and those for whom 70% or more of their patients spoke English. Patients of eligible physicians were mailed a survey inviting them to participate in the study and respond to a question that asked whether they felt fearful of their partner within the past 12 months.

[e] Usual care described as 2 violence screening questions on clinic intake form and usual clinic protocol for positive disclosures during encounters.

[f] Usual care described as standard IPV question on intake sheet and referral if IPV was discussed.

Figure 5. Benefit of IPV Interventions in Studies Enrolling Pregnant or Postpartum Women (Key Question 4)

Source	No. of Participants	Intervention Type	Measure	No. of Sessions	Follow-up, mo	Standardized Mean Difference (95% CI)
IPV (any type)						
Bair-Merritt et al,[33] 2010	643	Home visiting	CTS-2	Weekly	12	-0.04 (-0,23 to 0.14)
El-Mohandes et al,[31] 2008	336	Counseling (IPV + other)	CTS-2	6-10	5	-0.40 (-0.68 to -0.12)
Sharps et al,[36] 2016	239	Home visiting	CTS-2	Weekly (6)	24	-0.34 (-0.59 to -0.08)
Zlotnick et al,[38] 2011	54	Counseling (IPV)	CTS-2	5	6	0.22 (-0.37 to 0.80)
IPV (specific type)[a]						
Tiwari et al,[37] 2005	110	Counseling (IPV)	CTS-2 (minor physical)	1	5	-0.47 (-0.86 to -0.09)
	110	Counseling (IPV)	CTS-2 (psychological)	1	5	-0.39 (-0.78 to -0.01)
	110	Counseling (IPV)	CTS-2 (sexual)	1	5	-0.12 (-0.50 to 0.26)
	110	Counseling (IPV)	CTS-2 (severe physical)	1	5	-0.09 (-0.47 to 0.29)
Birth outcomes						
El-Mohandes et al,[31] 2008	306	Counseling (IPV + other)	LBW (<2500 g)	6-10	5	-0.22 (-0.59 to 0.15)
	306	Counseling (IPV + other)	VLBW (<1500 g)	6-10	5	-0.98 (-2.16 to 0.19)
	306	Counseling (IPV + other)	PTB (<37 wks)	6-10	5	-0.83 (-1.69 to 0.02)
	306	Counseling (IPV + other)	VPTB (<33 wks)	6-10	5	-0.16 (-0.52 to 0.19)
Depression						
Tiwari et al,[37] 2005	110	Counseling (IPV)	EPDS	1	5	-0.75 (-1.24 to -0.26)
Zlotnick et al,[38] 2011	54	Counseling (IPV)	EPDS	5	6	-0.32 (-0.91 to 0.26)
PTSD symptoms						
Zlotnick et al,[38] 2011	54	Counseling (IPV)	DTS	5	6	-0.05 (-0.63 to 0.53)
QOL[b]						
Tiwari et al,[37] 2005	110	Counseling (IPV)	SF-36 (bodily pain)	1	5	0.48 (0.10 to 0.87)
	110	Counseling (IPV)	SF-36 (general health)	1	5	0.10 (-0.28 to 0.48)
	110	Counseling (IPV)	SF-36 (mental health)	1	5	-0.02 (-0.40 to 0.36)
	110	Counseling (IPV)	SF-36 (physical)	1	5	-0.50 (-0.88 to -0.11)
	110	Counseling (IPV)	SF-36 (physical role)	1	5	-0.41 (-0.80 to -0.03)
	110	Counseling (IPV)	SF-36 (social)	1	5	-0.16 (-0.54 to 0.23)
	110	Counseling (IPV)	SF-36 (vitality)	1	5	-0.03 (-0.41 to 0.35)



CTS-2, Conflict Tactics Scale 2; DTS, Davidson Trauma Scale; EPDS, Edinburgh Postnatal Depression Scale; IPV, intimate partner violence; LBW, low birth weight; PTB, preterm birth; PTSD, posttraumatic stress disorder; QOL, quality of life; SF-36, 36-Item Short Form Health Survey; VLBW, very low birth weight; VPTB, very preterm birth.

[a] CTS-2 scales: minor physical assault, psychological aggression, sexual coercion, severe physical assault.

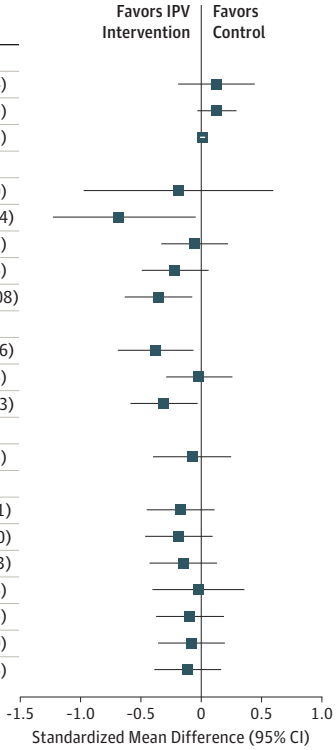
[b] SF-36 sections: bodily pain, general health perceptions, mental health, physical functioning, physical role functioning, social role functioning, vitality.

women for IPV over 3 to 18 months of follow-up.[12,13] RCTs of IPV screening were limited by heterogeneity in enrollment settings and screening processes; however, trials measured similar outcomes and found consistent results. Potential harms of screening asymptomatic populations for abuse include labeling, stigma, and increased violence. No included RCT found harms associated with screening. However, only 1 RCT actively monitored harms; these were assessed 14 days after screening, which may not be an adequate duration.[15] Other potential harms include false-positive test results that lead to more in-depth inquiry or referrals from health professionals that would not lead to benefit and may cause labeling.

Screening tools are available for clinical practice that may reasonably identify women experiencing past-year IPV. Most tools were assessed in only 1 study. In the 5 studies assessing accuracy of tools for detecting past-year IPV in women (HARK, HITS, E-HITS, PVS, and WAST), sensitivity ranged from 65% to 87% and specificity from 80% to 95%. When limiting to studies enrolling participants from non–emergency department settings (ie, primary care or community samples only), sensitivity was slightly higher (range, 75%-87%) and specificity was unchanged. Estimates of screening test accuracy for detecting past-year IPV were derived from populations with an IPV prevalence of 14% to 27%. This is similar to the prevalence reported by the KQ1 RCT enrolling women from US primary care settings (15%). In a population of 100 000 women with 15% prevalence of IPV, use of the HARK tool (80% sensitivity and 95% specificity) would result in 81 000 true-positive test results and 5000 false-positive results (positive predictive value, 83%). Use of the WAST tool, with slightly higher sensitivity (87%) but lower specificity (89%) than the HARK, in a population with the same IPV prevalence would result in 87 484 true-positive results and 11 000 false-positive results (positive predictive value, 56%). The meaning of false-positive test results is unclear. This may indicate a misunderstanding of the screening question; alternatively, women experiencing IPV may choose to

Figure 6. Benefit of IPV Interventions in Studies Enrolling Nonpregnant Women (Key Question 4)

Source	No. of Participants	Setting	Measure	No. of Sessions	Follow-up, mo	Standardized Mean Difference (95% CI)
IPV (any type)						
Hegarty et al,[39] 2013	272	PC	CAS	1-6	12	0.13 (-0.19 to 0.44)
Miller et al,[41] 2016	3540	FP	CTS-2	1	12	0.13 (-0.03 to 0.29)
Rhodes et al,[42] 2015	592	ED	CTS-2	1 (+1 call)	3	0.01 (-0.01 to 0.03)
IPV (specific type)[a]						
Miller et al,[40] 2011	156	FP	Birth control sabotage	1	3-6	-0.19 (-0.97 to 0.60)
	156	FP	Pregnancy coercion	1	3-6	-0.68 (-1.32 to -0.04)
Tiwari et al,[45] 2010	200	PC	CTS-2 (sexual)	1 (+12 calls)	5	-0.06 (-0.33 to 0.22)
	200	PC	CTS-2 (physical)	1 (+12 calls)	5	-0.22 (-0.49 to 0.06)
	200	PC	CTS-2 (psychological)	1 (+12 calls)	5	-0.35 (-0.63 to, -0.08)
Depression						
Hegarty et al,[39] 2013	200	PC	HADS	1-6	12	-0.38 (-0.69 to -0.06)
Saftlas et al,[43] 2014	204	FP	CESD-R10	1 (+3 calls)	6	-0.02 (-0.29 to 0.26)
Tiwari et al,[45] 2010	200	PC	CBDI-II	1 (+12 calls)	5	-0.31 (-0.59 to -0.03)
Anxiety						
Hegarty et al,[39] 2013	100	PC	HADS	1-6	12	-0.08 (-0.40 to 0.25)
QOL[b]						
Hegarty et al,[39] 2013	196	PC	WHOQOL-BREF (psychological)	1-6	12	-0.17 (-0.45 to, 0.11)
	196	PC	WHOQOL-BREF (physical)	1-6	12	-0.19 (-0.47 to, 0.10)
	196	PC	WHOQOL-BREF (environmental)	1-6	12	-0.15 (-0.43 to, 0.13)
	188	PC	SF-12 MCS	1-6	12	-0.02 (-0.40 to 0.36)
	196	PC	WHOQOL-BREF (social)	1-6	12	-0.09 (-0.37 to 0.19)
Tiwari et al,[45] 2010	200	PC	SF-12 PCS	1 (+12 calls)	5	-0.08 (-0.36 to 0.20)
	200	PC	SF-12 MCS	1 (+12 calls)	5	-0.11 (-0.39 to 0.16)



CAS, Composite Abuse Scale; CBDI-II, Chinese Beck Depression Inventory II; CESD-R10, Center for Epidemiologic Studies Short Depression Scale–10 Revised; CTS-2, Conflict Tactics Scale 2; FP, family planning clinic; HADS, Hospital Anxiety and Depression Scale; IPV, intimate partner violence; MCS, mental component summary; PC, primary care; PCS, physical component summary; QOL, quality of life; SF-12, 12-Item Short Form Health Survey; WHOQOL-BREF, World Health Organization Quality of Life–BREF.

[a] CTS-2 scales: sexual coercion, physical functioning, psychological aggression.

[b] WHOQOL-BREF domains: physical health, psychological, social relationships, environment.

answer the reference standard negatively, since disclosure of violence may be uncomfortable.

Evidence from 11 studies (n = 6740) evaluating interventions for women with screen-detected IPV was heterogeneous, imprecise, and often inconsistent. Two RCTs assessed home visiting interventions[33,36] and 1 found a significantly lower rate of any IPV among women in the intervention group than in the control group.[36] One RCT assessing a behavioral counseling intervention in pregnant women found benefit for IPV and very preterm birth.[47] The 6 RCTs enrolling nonpregnant women (all focused on brief counseling) generally found no benefit or mixed results.

Conclusions of this review for IPV interventions may differ slightly from those from the prior (2012) review for the USPSTF.[48] In addition to including several recently published studies, 1 trial (Mothers' Advocates in the Community [MOSAIC]) included in the prior report was excluded because it enrolled women referred to the intervention based on symptoms of abuse or self-disclosure of IPV status.[49] Women in the MOSAIC trial randomized to weekly home visits by trained nonprofessional peer supporters had lower mean abuse scores than women in the control group at 1 year.

Few RCTs reported on harms of interventions. No trial found increased IPV among the intervention group or other harms attributed to the intervention.

To better understand the benefits and harms of screening asymptomatic populations in primary care settings for abuse, future studies could assess whether screening specific groups results in improved health outcomes. Included RCTs of screening enrolled women of childbearing age, but none enrolled women from prenatal settings or reported outcomes separately for women screened during pregnancy. Screening studies should report on harms over a sufficient period after screening to assess potential psychosocial harms. In addition, research is needed to assess the accuracy of screening tools in men, as well as the benefit and harms of interventions for men who experience IPV.

No RCTs of screening or interventions for older and vulnerable adults were identified in this review. Studies of screening tools also are lacking. Screening and interventions for this population are likely to be different than those for IPV, given the nature of the abuse (eg, different relationship with the perpetrator). In addition, some older and vulnerable adults may not have sufficient physical, mental, or financial abilities to engage in screening. For these situations, instruments could be targeted toward caregivers. Additional challenges to this research may include legal requirements related to disclosure, underlying medical conditions of patients (eg, cognitive impairment), and dependence on the perpetrator for caregiving and access to medical care.

Table 4. Summary of Evidence for Intimate Partner Violence Screening

Studies (No. of Participants)	Summary of Main Findings (Including Consistency and Precision)	Consistency and Precision	Quality	Limitations (Including Reporting Bias)	Strength of Evidence	Applicability
KQ1: Benefits of Screening						
3 RCTs (n = 3759)	IPV (3 studies): No significant difference between screening and control groups over 3-18 mo	Consistent, imprecise	Good to fair	Studies enrolled participants from different settings (US primary care settings, 1 New Zealand emergency department, and mixed Canadian health care settings) and used diverse screening processes	Moderate for no benefit (IPV and QOL) Low for no benefit (health care utilization; depression; PTSD)	Unselected adult women presenting for primary care and emergency department visits; 1 large US trial was set in primary care clinics only
	QOL (2 studies): No significant difference between screening and control groups on SF-12 scores over 6-18 mo; 1 RCT also found no significant difference between groups on WHOQOL-BREF subdomains	Consistent, imprecise				
	Depression, PTSD, and health care utilization (1 study): No significant difference between groups for depression, PTSD, or health care utilization outcomes (each reported by only 1 trial each)	Unknown consistency, imprecise				
KQ2: Identifying Current, Past, or Increased Risk for Abuse and Neglect						
15 Cross-sectional (n = 4460)	Past-year IPV (women; 5 studies): Across 5 screeners (HARK, HITS, E-HITS, PVS, and WAST), sensitivity ranged from 65%-87% and specificity from 80% and 95%	Mostly consistent, imprecise	Fair	Most screeners were assessed in only 1 study; studies used different reference standards; handling of missing data was unclear (incomplete questionnaires) was often not reported; reporting bias not detected	Low (past-year or current IPV in women) Insufficient (past-year IPV in men)	Adult women seeking care in various clinical settings with unknown IPV symptom status
	Past-year IPV (men, 1 study): Sensitivity of 2 screeners (PVS, HITS) ranged from 30%-71% and specificity from 83%-88%	Unknown consistency, imprecise				
	Current or ongoing IPV (4 studies): Across 5 screeners (OAS, AAS, OVAT) accuracy varied widely	Inconsistent, imprecise				
KQ3: Harms of Screening						
2 RCTs (n = 935)	Two RCTs concluded no adverse effects of screening were identified	Consistent, unknown precision	Fair	One RCT did not report if harms were prespecified and the other collected harms using a structured questionnaire; however, timing (14 d after screening) may not be sufficient to assess harms; reporting bias not detected	Low for no harms	Adult women seeking care in various clinical settings
KQ4: Benefits of Treatment						
11 RCTs (n = 6740)	IPV exposure (10 studies): 2 found a statistically significant benefit in favor of intervention (1 home visit intervention, 1 counseling intervention addressing multiple risk factors); 1 other home visit intervention found an association with reduced IPV exposure, but differences were not statistically significant Seven RCTs evaluated a counseling intervention; 5 found similar rates of IPV exposure in both groups with no statistically significant differences and 2 reported on subtypes of violence only and found mixed results	Inconsistent, imprecise	Fair	Studies assessed heterogeneous interventions and measured IPV exposure at different time points using different outcome measures; benefit for IPV and birth outcomes in 1 counseling intervention may be related to counseling for other risks (smoking, depression) and not specific to counseling for IPV; reporting bias not detected	Low (IPV, QOL) Insufficient (anxiety, depression, PTSD, birth outcomes)	Women who screen positive for IPV during a routine primary care visit; studies that found significant benefit for reducing overall IPV enrolled pregnant women
	QOL (3 studies): 2 RCTs found no difference between groups on SF-12 scores, and 1 found mixed results across SF-36 subdomains	Mostly consistent, imprecise				
	Depression (5 studies): Inconsistent results across different measures (3 RCTs found significant benefit and 2 did not)	Inconsistent, imprecise				
	Anxiety (1 study): No significant benefit (similar HADS scores in both groups)	Unknown consistency, imprecise				
	PTSD (1 study): No significant benefit (similar PTSD symptom scores in both groups)	Unknown consistency, imprecise				
	Birth outcomes (1 study): Significantly lower rates of very preterm birth, no difference between groups for low birth weight neonates, very low birthweight neonates, or preterm births	Unknown consistency, imprecise				
KQ5: Harms of Treatment						
5 RCTs (n = 1409)	No study found significant harms associated with the interventions	Consistent, imprecise	Fair	Studies did not comment on whether harms were prespecified or how they were ascertained; reporting bias not detected	Low for no harms	Women who screen positive for IPV during a routine prenatal or primary care visit

Abbreviations: AAS, Abuse Assessment Screen; E-HITS, Extended HITS; HADS, Hospital Anxiety and Depression Scale; HARK, Humiliation, Afraid, Rape, Kick ; HITS, Hurt, Insult, Threaten, Scream; IPV, intimate partner violence; KQ, key question; OAS, Ongoing Abuse Screen; OVAT, Ongoing Violence Assessment Tool; PTSD, posttraumatic stress disorder; QOL, quality of life; PVS, Partner Violence Screen; RCT, randomized clinical trial; SF-12, 12-Item Short Form Health Survey; SF-36, 36-Item Short Form Health Survey; WAST, Woman Abuse Screening Tool; WHOQOL-BREF, World Health Organization Quality of Life–BREF.

Limitations

This review has several limitations. First, the scope focused on asymptomatic populations without signs or symptoms of abuse. The literature on whether certain physical or psychological symptoms should trigger an assessment of abuse (ie, "case finding") was not assessed. Second, this review did not evaluate evidence on programs to prevent abuse victimization or studies that assess screening and interventions for abuse perpetrators. Third, for KQ3 (harms of screening), the review was limited to study designs with a concurrent control group; this excluded uncontrolled studies. The prior review for the USPSTF concluded that study populations and methods in uncontrolled studies varied widely.[48] Results from these studies did not show significant harm related to screening; some found that a minority of women indicated discomfort with screening (particularly those with prior IPV), infringement of privacy, worries about increasing abuse by disclosing IPV, and feelings of sadness or depression.[48]

Conclusions

Although available screening tools may reasonably identify women experiencing IPV, trials of IPV screening in adult women did not show a reduction in IPV or improvement in quality of life over 3 to 18 months. Limited evidence suggested that home visiting and behavioral counseling interventions that address multiple risk factors may lead to reduced IPV among pregnant or postpartum women. No studies assessed screening or treatment for elder abuse and abuse of vulnerable adults.

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Acquisition, analysis, or interpretation of data: All authors.
Drafting of the manuscript: Feltner, Wallace, Berkman, Kistler, Middleton, Barclay, Higginbotham, Jonas.
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