Screening and Counseling for Intimate Partner and Domestic Violence

Women's Preventive Services Initiative Evidence Review Update

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CURRENT WPSI RECOMMENDATION[1]

SCREENING FOR INTERPERSONAL AND DOMESTIC VIOLENCE

Clinical Recommendations (2016)

The Women's Preventive Services Initiative recommends screening adolescents and women for interpersonal and domestic violence, at least annually, and, when needed, providing or referring for initial intervention services. Interpersonal and domestic violence includes physical violence, sexual violence, stalking and psychological aggression (including coercion), reproductive coercion, neglect, and the threat of violence, abuse, or both. Intervention services include, but are not limited to, counseling, education, harm reduction strategies, and referral to appropriate supportive services.

Implementation Considerations

The Women's Preventive Services Initiative recommends as a preventive service, screening adolescents and women for interpersonal and domestic violence. Factors associated with increased risk include, but are not limited to, pregnancy; younger and older age; increased stress; lesbian, gay, bisexual, transgender, and queer (or questioning) status; dependency; drug and alcohol misuse; former or current military service; and living in an institutional setting. There are multiple screening tools that have shown adequate sensitivity and specificity for identifying intimate partner violence and domestic violence in specific populations of women. Minimum screening intervals are unknown; however, based on the prevalence of interpersonal and domestic violence as well as evidence demonstrating that many cases are not reported, it is reasonable to conduct screening at least annually although the frequency and intensity of screening may vary depending on a particular patient's situation.

EVIDENCE SUMMARY

New evidence published since the previous Women's Preventive Services Initiative (WPSI) recommendation is summarized in **Table 1**.

Table 1. New Evidence Since the 2016 WPSI Recommendation

Effectiveness of screening
• No new studies.
Harms of screening
• No new studies.
Effectiveness of interventions
• 20 RCTs of IPV interventions for women with current or past IPV met inclusion criteria. • Of 10 RCTs of the effectiveness of an IPV intervention compared with alternative or usual care based in or referrable from a clinical setting, four RCTs showed reduced IPV and improved depression, anxiety, and psychological distress with the intervention while differences with comparison groups were not statistically significant in the other trials. • Of three RCTs of IPV interventions delivered in nurse home visitation programs versus usual care, one trial of an IPV empowerment intervention showed reduced IPV in the intervention group, while the other two trials showed no statistically significant differences between intervention and comparison groups. • Of seven RCTs of technology based IPV interventions, posttraumatic stress scores and depression improved in a trial of cognitive behavioral therapy; and IPV, reproductive coercion, and suicide risk improved in a trial of an online IPV decision aid compared with control groups. Differences between groups were not statistically significant in five other trials of online interactive interventions. • Most trials showed improvement in outcomes for both intervention and comparison groups, particularly when the comparison group received IPV information or usual care, suggesting benefits for comparison groups enrolled in the trials.
Harms of interventions
• 5 RCTs of IPV interventions reported no adverse events related to the intervention.

Abbreviations: IPV, intimate partner violence; RCT, randomized controlled trial.

INTRODUCTION

Recommendations for Screening for Intimate Partner Violence

In addition to the WPSI recommendation, several professional organizations recommend screening for intimate partner violence (IPV) (**Table 2**).

Table 2. Recommendations of Professional Organizations

Organization	Recommendation
USPSTF[2]	Screen women of childbearing age for intimate partner violence, such as domestic violence, and provide or refer women who screen positive to intervention services (Grade B 2018).
Bright Futures[3]	Discuss intimate partner violence at the prenatal, newborn, 1-month, 9-month, and 4-year visits and discuss interpersonal and dating violence at the middle and late adolescence health supervision visits. Bright Futures also recommends screening for social determinants of health, including family or neighborhood violence, school bullying, and intimate partner violence. Consider screening mothers and adolescents if they have a new intimate partner or when signs or symptoms raise concerns.
American College of Obstetricians and Gynecologists (ACOG) [4]	Screen all women for intimate partner violence at periodic intervals, such as annual examinations and new patient visits. Screening during obstetric care should occur at the first prenatal visit, at least once per trimester, and at the postpartum checkup.
American Medical Association (AMA) [5]	AMA encourages physicians to: (a) Routinely inquire about the family violence histories of their patients as this knowledge is essential for effective diagnosis and care; (b) Upon identifying patients currently experiencing abuse or threats from intimates, assess and discuss safety issues with the patient before he or she leaves the office, working with the patient to develop a safety or exit plan for use in an emergency situation and making appropriate referrals to address intervention and safety needs as a matter of course; (c) After diagnosing a violence-related problem, refer patients to appropriate medical or health care professionals and/or community-based trauma-specific resources as soon as possible; (d) Have written lists of resources available for survivors of violence, providing information on such matters as emergency shelter, medical assistance, mental health services, protective services and legal aid; (e) Screen patients for psychiatric sequelae of violence and make appropriate referrals for these conditions upon identifying a history of family or other interpersonal violence; (f) Become aware of local resources and referral sources that have expertise in dealing with trauma from IPV; (g) Be alert to men presenting with injuries suffered as a result of intimate violence because these men may require intervention as either survivors or abusers themselves; (h) Give due validation to the experience of IPV and of observed symptomatology as possible sequelae; (i) Record a patient's IPV history, observed traumata potentially linked to IPV, and referrals made; (j) Become involved in appropriate local programs designed to prevent violence and its effects at the community level.

Table 2. Recommendations of Professional Organizations

Organization	Recommendation
American Academy of Family Physicians (AAFP)[6]	Endorses the USPSTF recommendation to screen women of childbearing age for intimate partner violence, such as domestic violence, and provide or refer women who screen positive to intervention services.
American College of Emergency Physicians (ACEP) [7]	Assess patients for family violence in all its forms, including that directed toward children, elders, intimate partners, and other family members. Such patients should be appropriately referred for help and detailed evaluation.
Emergency Nurses Association (ENA)/International Association of Forensic Nurses (IAFN)[8]	Emergency nurses and forensic nurses routinely, consistently, and privately screen all adult and adolescent patients for IPV. Use available resources, such as sexual assault nurse examiners (SANE), forensic nurse examiners (FNE), and other specialized care providers, to assist in identification of and/or intervention with patients experiencing IPV.
American Academy of Pediatricians (AAP) [9]	Pediatricians should consider providing universal education and resource provision to caregivers of childbearing age. Screening with a validated tool is also an option to effectively identify IPV. Pediatricians should ensure adherence to developmental screening guidelines and referral to developmental and/or behavioral specialists if indicated for children at risk or exposed to IPV. Pediatricians are encouraged to intervene in a sensitive and skillful manner that attempts to validate the lived experiences of IPV survivors and maximize the safety of parents and caregivers and child victims. Referrals to community resources, when available, to support IPV survivors with safety planning and counseling services is recommended.

Types of Intimate Partner Violence

Intimate partner violence (IPV) refers to abuse or aggression committed by a current or former romantic partner[10] and is the preferred term in the field. *Domestic violence* refers to a broader category of abuse or aggression committed by a member of a family or household against another member and includes partner, child, and elder abuse, for example. *Interpersonal violence* describes all types of violence against an individual.

Women of all ages experience IPV and domestic violence, and its adverse effects on health can last a lifetime. Intimate partner violence can occur among heterosexual and same-sex couples in person, via social media, or texting, and does not require sexual intimacy. The Centers for Disease Control and Prevention (CDC) identifies four main types of IPV **(Table 3**):[11]

Table 3. Types of Intimate Partner Violence

IPV Type	CDC Definition[11]
Physical violence	The intentional use of physical force with the potential for causing death, disability, injury, or harm. May include (but not limited to): scratching; pushing; shoving; throwing; grabbing; biting; choking; shaking; aggressive hair pulling; slapping; punching; hitting; burning; use of a weapon; and use of restraints or one's body, size, or strength against another person. Also includes coercing other people to commit any of the above acts.

IPV Type	CDC Definition[11]
Sexual violence	Attempted or completed: • Rape or penetration of victim • Victim was made to penetrate someone else • Non-physically pressured unwanted penetration • Unwanted sexual contact • Non-contact unwanted sexual experiences (unwanted sexual events that are not of a physical nature that occur without the victim's consent) All these acts occur without the victim's consent, including cases in which the victim is unable to consent due to being too intoxicated (e.g., incapacitation, lack of consciousness, or lack of awareness) through their voluntary or involuntary use of alcohol or drugs.
Stalking	A pattern of repeated, unwanted, attention and contact that causes fear or concern for one's own safety or the safety of someone else (e.g., family member or friend).
Psychological aggression	The use of verbal and non-verbal communication with the intent to harm another person mentally or emotionally, and/or to exert control over another person.

Additional types of IPV have also been described. *Adolescent relationship abuse* (also called teen dating violence or dating abuse) includes emotional, physical, sexual, or economic abuse by an intimate or sexual partner among adolescents specifically.[12] *Reproductive coercion* refers to actions that exert control over a partner's reproductive health, such as access to contraception, and can occur in the absence of physical or sexual violence.[4]

Prevalence of Intimate Partner Violence

The National Intimate Partner and Sexual Violence Survey 2016/2017 Report[13] indicated that 47.3% of women in the United States experienced contact sexual violence, physical violence, and/or stalking in their lifetimes (**Table 4**). This included 42% reporting physical violence, 19.6% contact sexual violence, and 13.5% stalking. In addition, 49.4% experienced psychological aggression. The CDC reported that 55.3% of all homicides of females aged ≥18 years were IPV related using data from the National Violent Death Reporting System (18 states, 2003–2014).[14]

Table 4. Lifetime and 12-month Prevalence Rates of IPV for U.S. Women[13]

	Prevalence, % (n)	
Type of Violence	**Lifetime**	**Past 12 months**
Any contact sexual violence, physical violence, and/or stalking	47.3 (7,167)	7.3 (1,106)
Psychological aggression	49.4 (7,485)	6.7 (1,015)
Physical violence	42.0 (6,364)	4.5 (682)
Contact sexual violence	19.6 (2,970)	3.2 (485)
Stalking	13.5 (2,046)	2.5 (379)

Data from 15,152 women in the National Intimate Partner and Sexual Violence Survey 2016/2017 Report.[13] Some respondents reported multiple types of violence.

While IPV rates are high among all populations of women, they are highest among American Indian and Alaska Native, Black, and multiracial women;[13] pregnant and postpartum women,[15-18] particularly those with unintended pregnancies;[19] adolescent girls;[12,20,21] and members of the LGBTQ+ community.[22,23]

Intimate partner violence is associated with several physical, mental health, and social conditions that predispose women to additional vulnerability and risk. These include disability,[24] immigration status,[25] food and housing insecurity,[26] illicit drug use,[27] HIV infection,[28,29] and involvement in sex work.[30]

While prevalence rates of IPV are higher in specific populations and are associated with several physical, mental health, and social conditions, these are not generally considered individual risk factors for IPV. These conditions are not useful in selecting candidates for IPV screening because rates are high for all women regardless of their presence. The CDC classifies risk factors for IPV as factors associated with IPV perpetration that occur at the individual, relationship, community, and society levels.[31] These factors may be contributing factors, not direct causes of IPV, and commonly include combinations of factors operating at different levels, such as at individual and community levels.

Health Effects of Intimate Partner Violence

Intimate partner violence is considered a health condition and a social determinant of health because it results in multiple adverse acute and chronic health outcomes.[32] These include death and nonfatal traumatic injuries including contusions, fractures, strangulation, and traumatic brain injury that can result in chronic health disorders.[33] Sexual violence may cause sexually transmitted infections including HIV infection, sexual dysfunction, unintended pregnancy, pregnancy complications including preterm delivery, delayed prenatal care, and pelvic inflammatory disease. Chronic health effects include exacerbation of asthma, urinary tract infections, cardiovascular disease, fibromyalgia, irritable bowel syndrome, and chronic pain syndromes including headaches.[34]

Associated psychological conditions include anxiety, depression, posttraumatic stress disorder, antisocial behavior, suicidal ideation and behaviors, eating disorders, substance use, low self-esteem, fear of intimacy, emotional detachment, sleep disturbances, and inability to trust others.[33,35-38] Social repercussions may include restricted access to services, education, and career opportunities; strained relationships with health providers and employers; isolation from social networks; and homelessness.[37-39]

Health Care Services for Intimate Partner Violence

Utilization of health care services is 20% higher among women experiencing current or past IPV,[40] providing many opportunities to deliver appropriate IPV-related care. Access to services occurs through multiple clinical pathways. These include services to treat an IPV-related

condition, such as an injury resulting from acute trauma as a direct consequence of IPV. Also, IPV may be detected while the patient receives care for different reasons, such as during a routine maternity visit. The WPSI recommendation for *periodic universal IPV screening* specifically targets patients without signs or symptoms of IPV with or without a history of past IPV. This involves asking every patient a series of screening questions about their IPV experiences and current concerns.

In addition to universal screening, experts in the field now recommend *universal IPV education* that includes information about healthy relationships, health effects of IPV, and relevant resources and services.[41,42] Universal IPV education addresses knowledge gaps identified as barriers to disclosure in research studies.[43-45] Universal education is particularly beneficial for women reluctant to disclose IPV with screening or who may need information to prepare themselves or others for potential IPV exposure. In addition to knowledge gaps, many women experiencing IPV do not disclose because of concerns of the consequences of reporting, including retaliation[46,47] and harm to their children.[46] For some women, cultural and religious values or immigration status[48] may also pose barriers to reporting. These valid concerns have shifted the goal of IPV screening from disclosure to education.

Screening methods have been developed for administration in a variety of healthcare settings (e.g., obstetrics visits, primary-care settings, emergency department) (**Table 5**). Several instruments have demonstrated high sensitivity (>80%) in accurately detecting IPV in validation studies,[49] and are available in languages other than English.

Table 5. Clinical Screening Instruments for IPV Evaluated in Studies[49,50]

Measure	Components	Sensitivity; specificity
HITS	4 item (hurt, insult, threaten, scream), 5-point Likert scale, self-report or clinician administered survey; score ranges from 4-20 points, ≥11 indicates abuse.	86%; 99%
PSQ	3 items (physically hurt or threatened, afraid, order for protection), dichotomous scale; score ranges from 0-3.	19%; 93%
OVAT	4 item (threaten, beaten, would like to kill you, no respect), dichotomous scale; score ranges from 0-4.	86-93%; 83-86%
SAFE-T	5 items (secure at home, accepted by partner, family likes partner, even disposition of partner, talks with partner to resolve differences), dichotomous scale; score ranges from 0-5.	54%; 81%
PVS	3 items (past physical violence, perceived personal safety), dichotomous scale, clinician administered; score ranges from 0-3, with ≥1 indicates IPV.	49%; 94%
WAST	8 item (physical, sexual, and emotional abuse), 3-point response (0=never, 1=sometimes, 2=often) scale; scores range from 0-16; ≥4 indicates exposure to IPV. Short form includes 2 questions about tension in the relationship and how arguments are resolved.	47-88%; 89-96%

Measure	Components	Sensitivity; specificity
STaT	3 item (pushed or slapped, threatened with violence, partner has thrown, broken, or punched things), dichotomous, self-report scale; score ranges from 0-3.	96%; 75%
AAS	5 item (sexual coercion, lifetime abuse, current abuse, abuse during pregnancy), dichotomous scale, clinician administered survey; scores range from 0-5, with any positive response considered a positive screen.	32-93%; 55-99%
HARK	4 item (humiliation, afraid, rape, kick, dichotomous scale, self-report survey, adapted from AAS; scoring ranges from 0-4.	81%; 95%
Modified CTQ-SF	28 item (abuse and neglect in childhood), 8-point Likert scale, self-report survey; positive response (anything other than never) indicates exposure to IPV.	85%; 88%
OAS	5 item (threaten, beaten, would like to kill you, no respect), dichotomous scale; scores range from 0-5.	60%; 90%

Abbreviations: AAS=Abuse Assessment Screen; CTQ-SF=Conflict Tactics Scale-Revised Short Form; E-HITS=Extended Hurt/Insult/Threaten/Scream tool; HARK=Humiliation, Afraid, Rape, Kick tool; HITS=Hurt/Insult/Threaten/Scream tool; OAS=Ongoing Abuse Screen; OVAT=Ongoing Violence Assessment Tool; PSQ=Parent Screening Questionnaire; PVS=Partner Violence Screen; SAFE-T=Secure, Accepted, Family, Even, Talk measure; STaT=Slapped, Threatened, and Throw measure; WAST=Woman Abuse Screening Tool.

Universal screening identifies patient specific issues to direct care to appropriate services. Women exposed to IPV may require specialized medical care. Understanding the relationship of IPV to chronic health conditions that may be difficult to detect, such as traumatic brain injury[51] or strangulation,[52-54] can improve their diagnosis and treatment. In addition, women currently experiencing IPV may require interventions to reduce exposure to IPV. These interventions generally include advocacy and safety planning, education, and counseling that can occur within the healthcare setting or in partnership with community resources. Referrals to community-based services include advocacy programs, shelters and housing, assistance hot lines, home visitation programs, school and college-based health centers, support groups, and the criminal justice system, among others.[55,56] While these interventions may occur outside the healthcare setting, identification of IPV, education, and initiation of referrals can be initiated within the healthcare system and are within the scope of usual clinical practice.

EVIDENCE REVIEW UPDATE

USPSTF Systematic Review

A systematic review to update the USPSTF's recommendation on screening for IPV in 2018[57] included eligible studies from its prior reviews[58-60] and new studies published between 2011 through October 4, 2017. The update included three RCTs on the effectiveness of IPV screening; nine studies of the accuracy of screening instruments; and 11 RCTs of interventions for women with screen detected IPV (n=6740).[57]

Benefits and harms of screening: Three RCTs (n = 3759) compared IPV screening with no screening. None found significant improvements in outcomes, such as IPV exposure or quality of life, over 3 to 18 months. Two RCTs (n = 935) reported no harms of screening.

Accuracy of screening instruments: Nine studies assessed the accuracy of instruments to detect past-year or current IPV in women (summarized in **Table 5**). For past-year IPV (5 studies [n = 6331]), the sensitivity of five instruments ranged from 65% to 87% and specificity ranged from 80% to 95%. The accuracy of five instruments (4 studies [n = 1795]) for detecting current abuse varied widely; sensitivity ranged from 46% to 94% and specificity ranged from 38% to 95%. No instruments included in the review assessed past IPV beyond the current year.

Benefits and harms of IPV interventions: Eleven RCTs (n = 6740) evaluated interventions for women with screen detected IPV. Two trials enrolling pregnant women (n = 575) found significantly less IPV among women in the intervention group: one home visiting intervention (standardized mean difference [SMD], -0.34 [95% CI, -0.59 to -0.08]) and one behavioral counseling intervention for multiple risks (IPV, smoking, depression, tobacco exposure) (SMD, -0.40 [95% CI, -0.68 to -0.12]). The other trials showed no between group differences.

WPSI Review Update

Methods

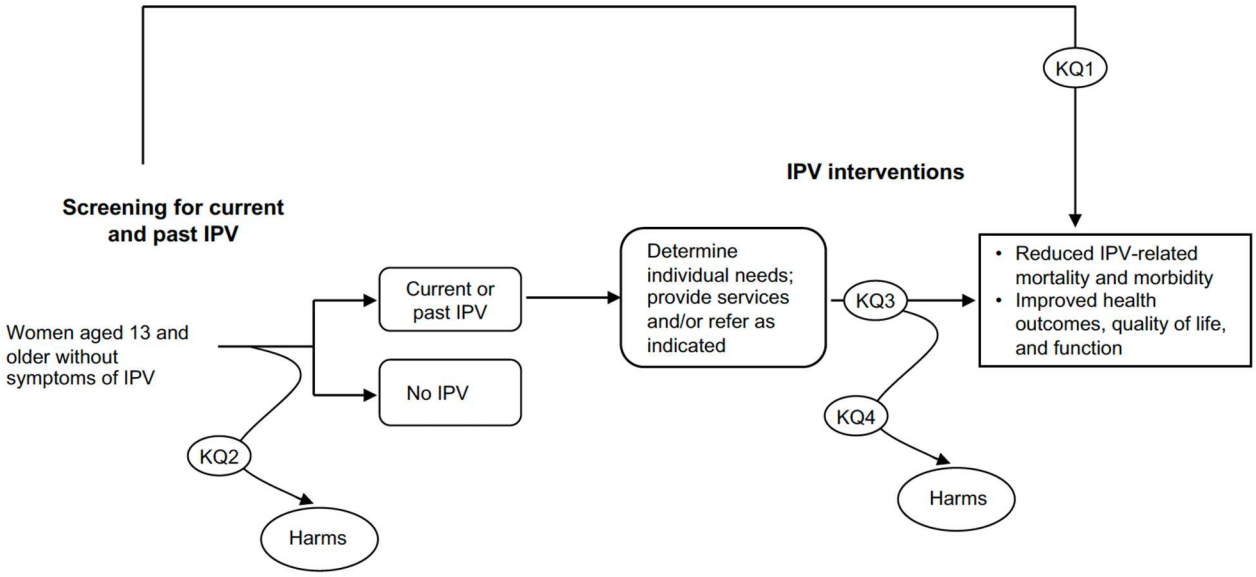
The evidence review update for the WPSI included two approaches:

Literature surveillance: The USPSTF conducts ongoing literature surveillance searches of published studies relevant to their recommendations to track developments in the field. LitWatch reports issued since January 2017 through July 2023 were reviewed to determine whether studies relevant to IPV screening have been published since the 2018 USPSTF review. One new RCT was identified from the surveillance searches and included in this review.

Literature searches: Targeted literature searches of the Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic Reviews, PsycInfo, and MEDLINE electronic databases (January 1, 2016 to August 22, 2023) were conducted to update the 2016 WPSI evidence review (**Appendix 1**). The searches addressed four key questions listed below. One key question from the previous review regarding the accuracy of IPV screening instruments was not included in this update because several accurate validated instruments were described in previous reviews and are now widely available in clinical practice.

Analytic Framework: The analytic framework outlining the patient population, interventions, outcomes, and links to key questions is depicted in **Figure 1** below.

Figure 1. Analytic Framework



Population: Adolescent and adult (≥13 years) women without recognized signs and symptoms of IPV are the target population for this review.

Key Questions: Among the target population,

1. Does screening for current, past, or increased risk for IPV reduce risk for IPV or IPV-related physical or mental health conditions?
2. What are the harms of screening for IPV?
3. Do interventions reduce exposure to IPV, IPV-related physical or mental health conditions, or mortality among women with current, past, or increased risk for IPV?
4. What are the harms of interventions for IPV?

Inclusion criteria: Studies were included that provided data for one or more key questions, were relevant to clinical practice in the United States, and were applicable to IPV screening or interventions occurring or referable from clinical settings (**Appendix 2**). These included primary care settings, obstetrics/gynecology clinics, family planning clinics, and other practice sites. Settings outside health systems were included if they could be accessed or connected from health systems, such as through referral.

RCTs and nonrandomized studies with comparison groups (usual care, wait list control, no treatment, alternate interventions) and systematic reviews of these studies were included to determine effectiveness and harms of screening and interventions. Studies enrolled adolescent and adult (≥13 years) women without recognized signs and symptoms of IPV, although studies of interventions that did not exclusively include this group were also considered. All forms of IPV as defined by the CDC as well as adolescent relationship abuse and reproductive coercion were included. Screening was conducted using validated instruments (e.g., HITS, PSQ, SAFE-T, OAS, etc.) or other clearly described methods.

Included studies evaluated the effectiveness or harms of screening and interventions to reduce IPV exposure or improve IPV-related health outcomes included counseling, nurse care management, advocacy interventions, education, skill-based learning, among others. Outcomes included exposure to IPV, mortality, physical health conditions (e.g., acute injury, chronic pelvic pain), mental health conditions (e.g., depression, anxiety, suicide), and other measures of health (e.g., quality of life). Potential harms of screening or interventions included any adverse outcome (e.g., retaliation).

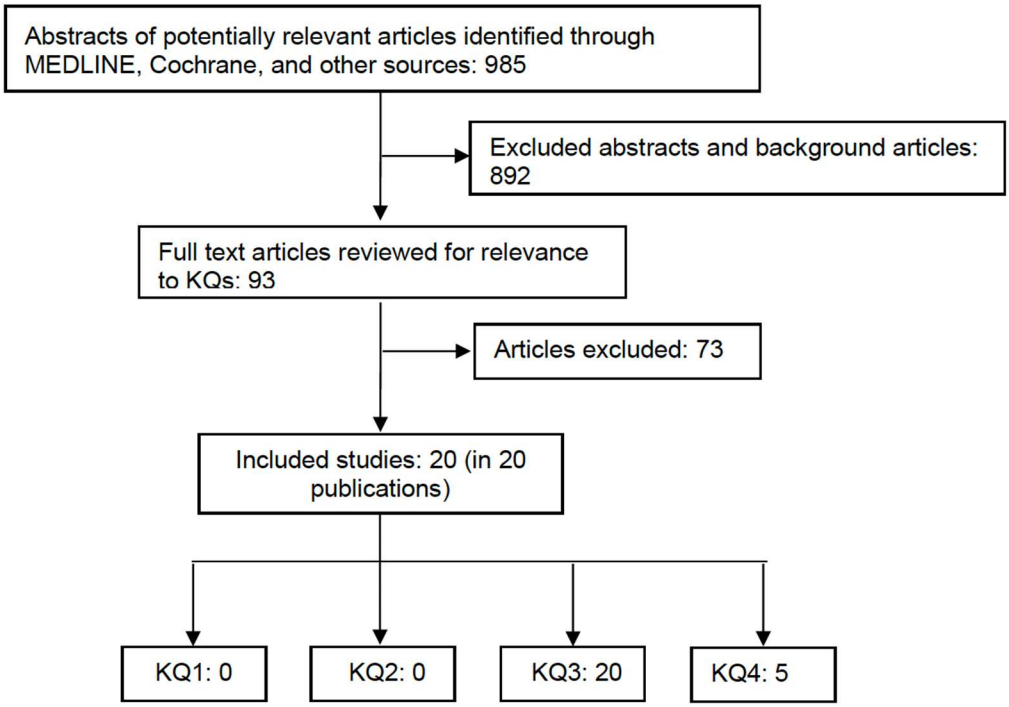
Data extraction: Data from included studies were extracted by a single investigator into evidence tables and independently verified by a second investigator. Data included characteristics of participants, setting, interventions, comparison groups, outcome measures, and results for each study.

Synthesis: Included studies were independently dual rated for quality based on criteria used by the USPSTF (good, fair, poor) (**Appendix 3**). Discrepancies were resolved through consensus. Studies were qualitatively synthesized. No statistical meta-analysis was conducted because of the heterogeneity of participants and interventions.

Results

Results of the search and selection process are summarized in **Figure 2** below.

Figure 2. Literature Flow Diagram



Key Questions 1 and 2: No studies of the effectiveness or harms of IPV screening versus no screening in health systems with IPV or health outcomes met inclusion criteria for Key Questions 1 and 2.

Key Question 3: Do interventions reduce exposure to IPV, IPV-related physical or mental health conditions, or mortality among women with current, past, or increased risk for IPV?

Twenty RCTs of interventions to reduce IPV exposure or IPV-related health outcomes for women experiencing current or past IPV met inclusion criteria (**Table 6**). These included 10 trials of clinic-based or clinic-referred interventions;[61-70] three trials of IPV interventions delivered in home visitation programs;[71-73] and seven trials of technology-based interventions.[74-80] Nine trials met criteria for good quality, 8 for fair, and 3 for poor (**Appendix 3**). Most study limitations were related to blinding of participants and investigators and attrition.

Clinic-based or clinic-referred interventions: Ten RCTs of the effectiveness of an IPV intervention versus a comparison based in or referrable from a clinical setting met inclusion criteria.[61-70] Although inclusion criteria varied across trials, all trials enrolled participants with self-reported recent or past IPV.

Six trials were based in clinical settings including prenatal clinics in Norway,[63] primary care clinics in Australia,[65] VA clinics in Boston,[66] family planning clinics in Pennsylvania,[68] hospitals in Belgium,[69] and a hospital-based behavioral health clinic in the United States.[70] Three clinic-based trials enrolled pregnant and postpartum women exclusively.[63,69,70] Four trials of community-based interventions that included participants recruited from clinical settings, among other sources, were conducted in the United States,[61,64] England and Wales,[62] Canada,[64] and Greece.[67] Two of these trials exclusively enrolled mothers.[61,64]

Interventions varied across trials. These included empowerment programs,[61,64,66] IPV counseling and education,[65,68] stress management,[67] psychological therapy,[62] and IPV information.[63,69,70] Comparison groups included waitlist controls,[61,64] no intervention,[67] receiving a thank you card for completing the baseline questionnaire and interview,[69] attention controls (i.e., information provided on another topic),[63] and usual care[62,65,66,68,70] that typically included standard IPV information and services.

The most frequently measured outcomes were IPV exposure, depression, and quality of life. Additional outcomes included psychological distress, stress, IPV-related posttraumatic stress symptoms, trauma, mental health measures including anxiety, and physical symptoms. Measures of empowerment, self-efficacy, psychosocial outcomes, and safety promoting behavior were frequently reported, but were not prespecified outcomes in the inclusion criteria for this review that focused on health outcomes. Outcomes were measured by numerous methods and standardized scales as detailed in **Table 6.**

Four RCTs indicated improved outcomes for the intervention versus comparison group, while six showed no statistically significant differences between groups. In a trial of 95 Spanish-speaking Latina mothers with IPV within the past 2 years, participants enrolled in a 10-week empowerment program had improved IPV scores on the Revised Conflict Tactics Scale (CTS-2) compared with waitlist controls.[61] However, differences between groups were not statistically significant in another trial using this intervention enrolling a different group of participants.[64]

In another trial comparing a psychological intervention plus usual support services versus usual services alone among women with past IPV in a community program in England and Wales, psychological distress and depression scores were improved with the intervention.[62] A trial of pregnant and postpartum women with IPV within the past year in a behavioral health clinic in the United States showed reduced IPV and emotional and physical abuse with a computerized intervention delivered on a small tablet computer versus usual care.[70] A trial of women with current or past IPV in Greece comparing a stress management and lifestyle program versus no intervention showed reduced stress, depression, and anxiety and increased self-esteem, self-efficacy, and social support after 8 weekly sessions.[67]

While differences in outcomes between intervention versus comparison groups were not statistically significant in the other trials, outcomes generally improved for both groups, particularly when the comparison group received IPV information or usual care. For example, in

a trial of women seeking maternity care who experienced recent IPV, both groups completed a questionnaire and interview.[69] The intervention group also received a referral card with contact details and safety tips while the comparison group received a thank you card. Outcome measures of IPV, psychosocial measures, and safety behavior improved similarly for both groups who found the questionnaire and interview more helpful than the referral card.

Home visitation program interventions: Three RCTs of IPV interventions delivered in nurse home visitation programs compared enhanced IPV assessment, education, and empowerment with usual care.[71,72,73] Participants included perinatal adolescent and young adult socially disadvantaged women in the United States and Canada. While one trial of an IPV empowerment intervention indicated reduced IPV (CTS-2) in the intervention versus comparison group,[73] the other two trials showed no statistically significant differences,[71,72] although IPV rates were low during the study period for both groups.

Technology-based interventions: Seven RCTs evaluated the effectiveness of technology-based IPV interventions by enrolling participants from multiple sources, including clinics, colleges and universities, and the internet in general.[74-80] Interventions included cognitive behavioral therapy[74] and interactive online IPV safety and health information that often included a patient decision aid.[75,76,77,78,79,80] Comparisons included waitlist controls[74] or a website with standard safety information but no personalized decision aids.[75,76,77,78,79,80]

Results of a trial of cognitive behavioral therapy versus waitlist control showed improved posttraumatic stress scores and depression in the intervention group, but not anxiety and quality of life after 8-weeks of therapy delivered by psychologists.[74] The trial enrolled women in Sweden with past or ongoing IPV and known mental health conditions.

Of the six trials of interactive online IPV safety and health information, one trial of women at colleges and universities in the United States showed reduced IPV (Composite Abuse Scale) and reproductive coercion, and improved suicide risk for the intervention group.[77] While the other trials generally showed improvement for both intervention and comparison groups, differences between groups were not statistically significant.[75,76,78,79,80]

Key Question 4: What are the harms of interventions for IPV?

Five trials of IPV interventions described potential harms (**Table 6**).[70,72,75,76,79] No adverse effects related to the interventions were reported.

Table 6. Recent RCTs of IPV Interventions

Study; Quality Rating	Population	Setting	Intervention	Comparison	Outcomes (measure)	Results
Clinic-based and clinic-referred interventions						
Clark et al, 2018[61] Poor	95 Spanish-speaking Latina mothers with IPV in past 2 y; mean age 35 y	United States (Texas, Michigan, Ohio); community-based program recruited through referrals and self-identification	Moms' Empowerment Program (MEP), 10-week intervention to empower women exposed to IPV through positive reinforcement and support	Waitlist control	IPV (CTS-2)	Total IPV scores for the intervention were significantly better than controls, β= -5.83, p=0.005.
Ferrari et al, 2018[62] Fair	249 women with IPV; mean age 33.5 y	England and Wales; community-based program	Usual Domestic Violence and Abuse agency support plus a psychological intervention (Psychological Advocacy Towards Healing, PATH)	Usual Domestic Violence and Abuse agency support (advocacy alone)	Psychological distress (CORE-OM); depression (PHQ-9); 12 mo follow-up	Improved outcomes with intervention vs. control: CORE-OM score difference: -3.3 points (95% CI, -5.5 to -1.2); clinical threshold: (OR 0.32; 95% CI, 0.16 to 0.64); PHQ-9 score difference: -2.2 points (95% CI, -4.1 to -0.3); clinical threshold (OR 0.41; 95% CI, 0.21 to 0.81)
Flaathen et al, 2022[63] Good	317 pregnant women at prenatal visits with IPV in past year; mean age 31 y	19 prenatal clinics in Norway	Tablet-based video intervention about IPV and safety behaviors	Video promoting healthy pregnancy in general	Quality of life (WHOQOL-BREF); IPV (CAS); 15-item checklist 3 mo postpartum	No differences between groups

Study; Quality Rating	Population	Setting	Intervention	Comparison	Outcomes (measure)	Results
Galano et al, 2021[64] Poor	118 mothers age >18 y with IPV in past 2 y; mean age 31.8 y	United States (Michigan) and Canada (Ontario); community-based program recruited through referrals and self-identification	Moms' Empowerment Program (MEP), 10 sessions over 5 weeks; intervention to empower women exposed to IPV through positive reinforcement and support	Waitlist control	IVP-related posttraumatic stress (PDS); IPV (CTS-2); cumulative trauma (PDS); depression (CES-D)	No differences between groups after 8 y follow-up; better results with higher session attendance
Hegarty et al, 2020[65] Fair	272 women who screened positive for fear of partner in past 12 mo; mean age 38.5 y	52 primary care clinics, Victoria, Australia	Physician delivered brief, woman-centered counselling	Physician delivered standard IPV information	Quality of life (WHOQOL-BREF); mental health (SF-12); depression; anxiety; PTSD; IPV (CAS); physical symptoms	No differences between groups: QOL measures (physical: 1.5; 95%, CI -2.9 to 5.9; psychological: -0.2; 95%, CI -4.8 to 4.4; social: -1.4; 95% CI, -8.2 to 5.4; environmental: -0.8; 95% CI, -4.0 to 2.5); mental health status (-1.6; 95% CI, -5.3 to 2.1); or secondary outcomes. Both groups improved on QoL, mental health, IPV, and anxiety
Iverson et al, 2022[66] Fair	60 women age ≥18 y; IPV within prior year	Veterans Health Administration hospital in Boston	Recovering from IPV through Strengths and Empowerment (RISE) psychosocial counseling intervention for IPV (1-6 sessions)	Enhanced usual care with a single counseling session	Empowerment (PAM-13); self-efficacy (GSES; PPS-R); depression (CES-D); IPV (CTS-2)	Improvement in empowerment, self-efficacy, depression, and IPV reduction; no differences between groups

Study; Quality Rating	Population	Setting	Intervention	Comparison	Outcomes (measure)	Results
Kokka et al, 2019[67] Fair	60 women; mean age 48 y; current or past IPV	Athens, Greece; wide recruitment	Stress management and lifestyle program; 1-hr for 8 weekly sessions	No intervention	Depression (BDI), anxiety, and stress (DASS-21; PSS-14); 8-wk follow-up	Intervention vs. control: reduced stress, depression, anxiety; increased self-esteem, self-efficacy, social support
Miller et al, 2016[68] Good	3687 women age 16-29 y who agreed to a follow-up interview	United States; 25 family planning clinics in Western Pennsylvania	Counseling and education for IPV and supported referrals to IPV services (1 session during clinic visit); 12-month follow-up	Standard IPV question on intake sheet and referral if IPV was discussed	IPV (CTS-2); reproductive coercion; self-efficacy	Intervention vs. control: no difference in IPV (ARR=1.07; 0.84–1.38) or reproductive coercion (ARR=1.50; 0.95–2.35); increased knowledge of IPV resources (ARR=4.25; 3.29–5.50) and self-efficacy measures (ARR=0.06; 0.02–0.10)
Van Parys et al, 2017[69] Good	189 women seeking maternity care with recent IPV; mean age 27.7 y	11 Belgian hospitals	Questionnaire and interview followed by a referral card with contact details of services and tips to increase safety behavior	Questionnaire and interview followed by a "thank you" card	IPV (CTS-2); Abbreviated Psychosocial Scale; safety promoting behavior checklist; 10 mo follow-up	Outcome measures improved for both groups with no differences between groups; both the questionnaire and the interview were more helpful than the referral card itself ($p<0.001$)

Study; Quality Rating	Population	Setting	Intervention	Comparison	Outcomes (measure)	Results
Zlotnick et al, 2019[70] Fair	53 women (pregnant or 6-months postpartum); IPV in past 12 mo; mean age 28 y	United States; large urban hospital-based behavioral health clinic for perinatal women	Information on IPV and community resources; computerized intervention (30-40 minutes) delivered on a small tablet-computer in a private area	Information on IPV and community resources; television shows on a computer with questions about preferences	IPV (CAS)	IPV decreased at 4-month follow-up with the intervention ($p<0.001$); intervention vs. control differed for reduced IPV ($p<0.01$) and emotional ($p=0.023$) and physical abuse ($p=0.060$). 22 serious adverse events unrelated to the study.
Home-visiting IPV interventions						
Feder et al, 2018[71] Fair	330 women ≥14 y; in home visitation program; mean age 20 y	United States (Oregon); Nurse Family Partnership (NFP) home visiting program to promote maternal and child health	Nurse assessment of IPV, secondary prevention component for those reporting IPV, primary prevention component for all participants	Usual care	IPV (CTS-2); 2-year follow-up	No differences between groups
Jack et al, 2019[72] Good	492 socially disadvantaged perinatal women ≥16 y; mean age 20.4 y; enrolled in home visitation program	Canada; 15 sites in 8 states; nurse home visitation program	Nurse-delivered IPV intervention to assess and tailor care on safety planning, violence awareness, self-efficacy, and social support	Usual care with limited questions about violence and information for abused women	Quality of life (WHOQOL-BREF); multiple secondary outcomes; measures every 6 mo for 24 mo	No differences between groups; no adverse events

Study; Quality Rating	Population	Setting	Intervention	Comparison	Outcomes (measure)	Results
Sharps et al, 2016[73] Fair	239 pregnant women ≥14 y; ≤32 wk gestation; mean age 24.0 y; Medicaid eligible; screened positive for IPV	United States; urban and rural perinatal home-visiting programs	IPV empowerment intervention embedded into a home visiting program (DOVE); 3 sessions (15-25 min) during pregnancy and 3 postpartum visits; 24-mo follow-up	Assessment and referral for IPV, discussion of perinatal IPV only if indication or if woman raises a concern	IPV (CTS-2)	Greater mean decline in IPV scores for intervention versus control (40.82 vs. 35.87; p<0.01)
Technology-based interventions						
Andersson et al, 2021[74] Fair	63 women age ≥18 y; mean age 42.2 y; past or ongoing IPV; mental health problem requiring treatment	Sweden	Internet delivered cognitive behavioral therapy over 8 weeks administered by psychologists	Waitlist	PTSD (PDS; IES-R; PC-PTSD); depression (BDI-II; PHQ-9); anxiety (BAI); quality of life (QOLI)	Improvement with intervention vs. control: IES-R; PC-PTSD; BDI-II; no differences in PDS, PHQ-9; BAI; QOLI
Ford-Gilboe et al, 2020[75] Good	462 women >19 y; mean age 34.6 y; history of IPV	Canada (British Columbia, Ontario, New Brunswick)	Tailored, interactive online safety and health intervention (iCAN Plan 4 Safety); reminder messages	A static, non-tailored version of the tool	Depression (CESD); PTSD; secondary outcomes (coercive control, anxiety)	Both groups improved for depression (p<0.001) and PTSD (p<0.001) and for all secondary outcomes (coercive control, anxiety); no differences between groups. No harms reported

Study; Quality Rating	Population	Setting	Intervention	Comparison	Outcomes (measure)	Results
Glass et al, 2017[77] Good	720 adult women; mean age 33.4 y; Spanish- or English-speaking; history of IPV	United States (Arizona, Maryland, Missouri, Oregon)	Tailored, internet-based safety decision aid (priority setting activities, risk assessment, and tailored feedback and safety plans); measures at 6, 12 mo	Website with standard safety information available online	IPV; depression; (CESD-R); coercive control (WEB); PTSD	No differences in IPV; depression scores; coercive control scores; and PTSD scores
Glass et al, 2022[76] Good	346 college women; mean age 20.6-21.2 y	41 colleges and universities in the United States (Oregon, Maryland)	Free interactive decision aid and safety planning intervention via a mobile app and website (myPlan)	Usual safety planning website provided to students on campus	IPV (CAS); RC; suicide risk; safety behaviors; measures at 6, 12 mo	Reduced CAS scores (p=0.006); reduced reproductive coercion (p=0.019); improved suicide risk (p=0.46). No harms reported.
Hegarty et al, 2019[78] Good	422 women aged 16-50 y; mean age 33.7 y; screened positive for IPV	Australia	Online healthy relationship tool/website and safety decision aid for IPV (IDECIDE)	Static IPV information website	IPV rates; depression (CESD-R); measures at posttest, 6, 12 mo	No differences between groups for IPV or depression
Koziol-McLain et al, 2019[79] Good	412 women >16 y; median age 29.0 y; IPV in the past 6 mo; 27% Māori	New Zealand	Interactive Web-based safety decision aid (iSafe)	Website with standard, non-individualized Information and list of resources and emergency safety plans	IPV (SVAWA); depression (CESD-R)	No differences between groups for IPV or depression. No study-related adverse events were reported

Study; Quality Rating	Population	Setting	Intervention	Comparison	Outcomes (measure)	Results
van Gelder et al, 2023[80] Poor	198 women with IPV	Netherlands; self-referred through the internet	SAFE eHealth intervention: IPV information; support options; mental health; social support	Limited information on IPV	Self-efficacy, depression, anxiety; fear of partner; social support at 6 mo	No differences between groups; high attrition

Abbreviations: ARR, adjusted relative risk; BAI, Beck Anxiety Inventory; BDI-II, Beck Depression Inventory-II; CES-D, Center for Epidemiologic Studies Depression Scale; CAS, Composite Abuse Scale; CTS-2, Revised Conflict Tactics Scale; DASS-21, Depression, Anxiety, and Stress Scale; DOVE, Domestic Violence Enhanced Home Visitation Program; GSES, General Self-Efficacy Scale; IES-R, Impact of Event Scale-Revised; IPV, intimate partner violence; KQ, key question; NR, not reported; PAM-13, Patient Activation Measure; PC-PTSD, Primary Care PTSD Screen; PDS, Posttraumatic Diagnostic Scale; PHQ-9, Patient Health Questionnaire-9; PPS-R, Personal Progress Scale Revised; PSS-14, Perceived Stress Scale; QOLI, Quality of Life Inventory; SE, standard error; SMD, standard mean difference; SVAWS, Severity of Violence Against Women Scale; WHOQOL-BREF, World Health Organization Quality of Life-BREF.

Discussion

This evidence review update of the effectiveness and harms of IPV screening identified 20 relevant RCTs published since 2016. No studies evaluated the effectiveness or harms of IPV screening versus no screening in health systems with IPV or health outcomes.

Of 10 RCTs of the effectiveness of an IPV intervention versus a comparison based in or referrable from a clinical setting, four RCTs indicated improved outcomes with the intervention while differences between groups were not statistically significant in the other trials. Outcomes generally improved for both groups, particularly when the comparison group received IPV information or usual care. Of three RCTs of IPV interventions delivered in nurse home visitation programs, one trial of an IPV empowerment intervention indicated reduced IPV in the intervention group, while the other two trials showed no statistically significant differences between intervention and comparison groups. Of seven RCTs of technology-based IPV interventions, posttraumatic stress scores and depression were improved in a trial of cognitive behavioral therapy; and IPV, reproductive coercion, and suicide risk were improved in a trial of an online IPV decision aid. Five other trials of online interactive interventions generally showed improvement for both intervention and comparison groups, although differences between groups were not statistically significant. Five trials of IPV interventions described no adverse effects related to the interventions.

Collectively, these studies are consistent with previous trials that suggest improved IPV and IPV-related health outcomes with interventions, but often do not detect statistically significant differences between intervention and comparison groups. However, several of the newer trials showed benefit with interventions that could be accessible to women with IPV identified through health system screening. These trials also took a broader view of IPV interventions than previous screening trials that focused on IPV disclosure and immediate safety planning in a clinic. While safety planning is important, the scope of IPV-related care is more comprehensive and extends beyond immediate safety.

Limitations of studies: Studies often enrolled small numbers of participants, evaluated different types of interventions, and collected various types of outcome measures including intermediate outcomes (e.g., behavior change, self-efficacy, etc.). Most trials were designed as pilot studies and were not appropriately powered to detect between-group differences, particularly when both intervention and comparison groups were provided services.

In general, studies of the effectiveness of IPV screening and interventions have inherent methodological limitations related to the ethics of randomization, blinding, controlling of confounding variables, control group interventions, follow up, and measurement and ascertainment of outcomes. While these issues are fundamental to determining the risk of bias (quality) of RCTs, they are most relevant to drug trials, not behavioral interventions for IPV.

Studies of IPV interventions are based on self-reported disclosure for both predictor and outcome measures. Self-reported disclosure likely underreports IPV because many women

experiencing IPV do not disclose for important reasons including retaliation, concerns for safety and custody of their children, distrust of the healthcare system, involvement with the criminal justice system, loss of confidentiality, and stigma, among others. Efforts to verify IPV status through other types of records could violate confidentiality and cause harm.

Also, in most IPV intervention studies, the control group is provided with usual or alternate care for ethical reasons. The control interventions could increase participants' self-awareness of IPV, affect their utilization of services, and influence trial outcomes by creating a substantial Hawthorne effect (i.e., the phenomenon that study participants change their behavior because of being involved in the study).[49] As a result, differences between intervention and control groups may be diminished, and the effectiveness of the intervention may be underestimated.

In addition, study participants may experience changes in their circumstances during the study that require services that differ from the intervention to which they were randomized, they may need to relocate, or have another reason to withdraw from the study. As a result, studies usually have high attrition and loss to follow up and are unable to capture long-term outcomes.

Future research: Future research on IPV screening and interventions should address limitations of current trials that are amenable to modification such as enrolling large numbers of participants, expanding the types of IPV experiences included, focusing on promising interventions that integrate health care systems with additional community resources, and using consistent variables and outcome measures. Research on reducing risk factors for perpetration of IPV, as described by the CDC report,[31] is another approach to reducing IPV for women.

Relevance to IPV screening recommendations: In addition to supporting clinical recommendations for IPV screening, the new trials of IPV interventions support three issues relevant to IPV screening. These include inclusion of midlife and older women in screening recommendations; the value of universal IPV education in addition to screening; and the alignment of IPV screening in health systems with IPV interventions and resources in communities.

The incidence and prevalence of IPV is high across the lifespan,[13] and 12 trials of IPV interventions included in this update enrolled women outside of maternity, family planning, or college settings and included women older than 40 years. While incidence rates are higher among young ages[15-18] and IPV has been most frequently studied in the context of maternity care, IPV screening and interventions are also relevant to women's health care for midlife[81] and older women.[82-86]

In addition to universal IPV screening, IPV experts and advocates recommend universal education that includes information about healthy relationships, health effects of IPV, and relevant resources and services.[41,42] Disclosure is no longer the primary goal of screening, recognizing that many women will not self-disclose. Trials of IPV interventions support this approach by including educational components in the interventions, alone or accompanied by

other components.[68,87,88] Improvements in outcomes in comparison groups of trials that provided education as the "control" intervention provide additional evidence of its benefit.[65,66,69,75,77]

Evidence for recommendations for IPV screening in health systems must consider the effectiveness of interventions outside of health systems that are assessable or referrable from the point of screening. A broader view of IPV-related health care and the evidence to support it aligns more closely with IPV interventions and resources in community programs.[89-91] Several trials included in this update replicated these real-world conditions by extending beyond health care settings.

REFERENCES

1. Women's Preventive Services Initiative. Interpersonal and Domestic Violence. https://www.womenspreventivehealth.org/recommendations/interpersonal-and-domestic-violence/. Accessed August 27, 2023.
2. Curry SJ, Krist AH, Owens DK, et al. Screening for intimate partner violence, elder abuse, and abuse of vulnerable adults: US Preventive Services Task Force final recommendation statement. JAMA. 2018;320(16):1678-87. doi: 10.1001/jama.2018.14741. PMID: 30357305.
3. American Academy of Pediatrics. Performing Preventive Services: A Bright Futures Handbook. In: Tanski S, Garfunkel LC, Duncan PM, Weitzman M, eds.: American Academy of Pediatrics; 2010.
4. ACOG Committee Opinion No. 518: Intimate partner violence. Obstet Gynecol. 2012;119(2 Pt 1):412-7. doi: 10.1097/AOG.0b013e318249ff74. PMID: 22270317.
5. American Medical Association. Family and Intimate Partner Violence H-515.965. 2019. https://policysearch.ama-assn.org/policyfinder/detail/*?uri=%2FAMADoc%2FHOD.xml-0-4664.xml. Accessed August 30, 2023.
6. American Academy of Family Physcians. Clinical Preventive Service Recommendation: Intimate Partner Violence and Abuse of Vulnerable Adults. https://www.aafp.org/family-physician/patient-care/clinical-recommendations/all-clinical-recommendations/domestic-violence.html. Accessed August 30, 2023.
7. American College of Emergency Physcians. Policy Statement: Domestic Family Violence. 2019. https://www.acep.org/patient-care/policy-statements/domestic-family-violence. Accessed August 30, 2023.
8. Emergency Nurses Association/International Association of Forensic Nurses. Joint Position Statement: Inimate Partner Violence. 2018. https://www.forensicnurses.org/wp-content/uploads/2021/11/intimate_partner_violence_jo.pdf. Accessed August 30, 2023.
9. Thackeray J, Livingston N, Ragavan MI, et al. Intimate partner violence: role of the pediatrician. Pediatrics. 2023;152(1):e2023062509. doi: 10.1542/peds.2023-062509.
10. Centers for Disease Control and Prevention. Fast Facts: Preventing Intimate Partner Violence. 2022. https://www.cdc.gov/violenceprevention/intimatepartnerviolence/fastfact.html. Accessed August 25, 2023.
11. Breiding M, Basile KC, Smith SG, et al. Intimate partner violence surveillance: uniform definitions and recommended data elements. Version 2.0 National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Atlanta, GA: 2015. https://www.cdc.gov/violenceprevention/pdf/intimatepartnerviolence.pdf.
12. Vagi KJ, O'Malley Olsen E, Basile KC, et al. Teen dating violence (physical and sexual) among US high school students: findings from the 2013 National Youth Risk Behavior Survey. JAMA Pediatr. 2015;169(5):474-82. doi: 10.1001/jamapediatrics.2014.3577. PMID: 25730143.
13. Leemis RW, Friar N, Khatiwada S, et al. The National Intimate Partner and Sexual Violence Survey: 2016/2017 Report on Intimate Partner Violence National Center for

Injury Prevention and Control, Centers for Disease Control and Prevention Atlanta, GA: 2022.
14. Petrosky E, Blair JM, Betz CJ, et al. Racial and ethnic differences in homicides of adult women and the role of intimate partner violence - United States, 2003-2014. MMWR Morb Mortal Wkly Rep. 2017;66(28):741-6. doi: 10.15585/mmwr.mm6628a1. PMID: 28727682.
15. El Kady D, Gilbert WM, Xing G, et al. Maternal and neonatal outcomes of assaults during pregnancy. Obstet Gynecol. 2005;105(2):357-63. doi: 10.1097/01.Aog.0000151109.46641.03. PMID: 15684165.
16. Hahn CK, Gilmore AK, Aguayo RO, et al. Perinatal intimate partner violence. Obstet Gynecol Clin North Am. 2018;45(3):535-47. doi: 10.1016/j.ogc.2018.04.008. PMID: 30092927.
17. Román-Gálvez RM, Martín-Peláez S, Fernández-Félix BM, et al. Worldwide prevalence of intimate partner violence in pregnancy. A systematic review and meta-analysis. Front Public Health. 2021;9:738459. doi: 10.3389/fpubh.2021.738459. PMID: 34527656.
18. Saltzman LE, Johnson CH, Gilbert BC, et al. Physical abuse around the time of pregnancy: an examination of prevalence and risk factors in 16 states. Matern Child Health J. 2003;7(1):31-43. doi: 10.1023/a:1022589501039. PMID: 12710798.
19. Nelson HD, Darney BG, Ahrens K, et al. Associations of unintended pregnancy with maternal and infant health outcomes: A Systematic Review and Meta-analysis. JAMA. 2022;328(17):1714-29. doi: 10.1001/jama.2022.19097. PMID: 36318133.
20. Exner-Cortens D, Eckenrode J, Rothman E. Longitudinal associations between teen dating violence victimization and adverse health outcomes. Pediatrics. 2013;131(1):71-8. doi: 10.1542/peds.2012-1029. PMID: 23230075.
21. Taylor BG, Mumford EA. A national descriptive portrait of adolescent relationship abuse: results from the National Survey on Teen Relationships and Intimate Violence. J Interpers Violence. 2016;31(6):963-88. doi: 10.1177/0886260514564070. PMID: 25548142.
22. Badenes-Ribera L, Bonilla-Campos A, Frias-Navarro D, et al. Intimate partner violence in self-identified lesbians: a systematic review of Its prevalence and correlates. Trauma Violence Abuse. 2016;17(3):284-97. doi: 10.1177/1524838015584363. PMID: 26018210.
23. Peitzmeier SM, Malik M, Kattari SK, et al. Intimate partner violence in transgender populations: systematic review and meta-analysis of prevalence and correlates. Am J Public Health. 2020;110(9):e1-e14. doi: 10.2105/AJPH.2020.305774. PMID: 32673114.
24. Breiding MJ, Armour BS. The association between disability and intimate partner violence in the United States. Ann Epidemiol. 2015;25(6):455-7. doi: 10.1016/j.annepidem.2015.03.017. PMID: 25976023.
25. Stockman JK, Hayashi H, Campbell JC. Intimate partner violence and its health impact on ethnic minority women [corrected]. J Womens Health (Larchmt). 2015;24(1):62-79. doi: 10.1089/jwh.2014.4879. PMID: 25551432.
26. Breiding MJ, Basile KC, Klevens J, et al. Economic insecurity and intimate partner and sexual violence victimization. Am J Prev Med. 2017;53(4):457-64. doi: 10.1016/j.amepre.2017.03.021. PMID: 28501239.

27. Mehr JB, Bennett ER, Price JL, et al. Intimate partner violence, substance use, and health comorbidities among women: A narrative review. Front Psychol. 2022;13:1028375. doi: 10.3389/fpsyg.2022.1028375. PMID: 36778165.
28. Marshall KJ, Fowler DN, Walters ML, et al. Interventions that address intimate partner violence and HIV among women: a systematic review. Aids Behav. 2018;22(10):3244-63. doi: 10.1007/s10461-017-2020-2. PMID: 29313192.
29. Sareen J, Pagura J, Grant B. Is intimate partner violence associated with HIV infection among women in the United States? Gen Hosp Psychiatry. 2009;31(3):274-8. doi: 10.1016/j.genhosppsych.2009.02.004. PMID: 19410107.
30. Jiwatram-Negrón T, El-Bassel N. Overlapping intimate partner violence and sex trading among high-risk women: Implications for practice. Women Health. 2019;59(6):672-86. doi: 10.1080/03630242.2018.1544967. PMID: 30543494.
31. Centers for Disease Control and Prevention. Risk and Protective Factors for Perpetration. 2021. https://www.cdc.gov/violenceprevention/intimatepartnerviolence/riskprotectivefactors.html. Accessed August 27, 2023.
32. Stubbs A, Szoeke C. The effect of intimate partner violence on the physical health and health-related behaviors of women: a systematic review of the literature. Trauma Violence Abuse Rev J. 2022;23(4):1157-72. doi: 10.1177/1524838020985541. PMID: 33541243.
33. Black MC. Intimate partner violence and adverse health consequences: implications for clinicians. Am J Lifestyle Med. 2011:428-39.
34. Centers for Disease Control and Prevention. Intimate Partner Violence: Consequences. http://www.cdc.gov/violenceprevention/intimatepartnerviolence/consequences.html. Accessed May 14, 2016.
35. Coker AL, Davis KE, Arias I, et al. Physical and mental health effects of intimate partner violence for men and women. Am J Prev Med. 2002;23(4):260-8. PMID: 12406480.
36. Roberts TA, Klein JD, Fisher S. Longitudinal effect of intimate partner abuse on high-risk behavior among adolescents. Archives of pediatrics & adolescent medicine. 2003;157(9):875-81. doi: 10.1001/archpedi.157.9.875. PMID: 12963592.
37. Warshaw C BB, Gil J. Mental health consequences of intimate partner violence. In: Mitchell C, Anglin D, eds. Intimate partner violence: a health- based perspective. New York: Oxford University Press; ; 2009:147-71.
38. Heise L, Garcia-Moreno C. Violence by intimate partners. In: Krug E, Dahlberg LL, Mercy JA, et al., eds. World report on violence and health. geneva, Switzerland: World Health Organization. . Geneva (Switzerland): World Health Organization; ; 2002:87-121.
39. Plichta SB. Intimate partner violence and physical health consequences: policy and practice implications. J Interpers Violence. 2004;19(11):1296-323. doi: 10.1177/0886260504269685. PMID: 15534333.
40. Rivara FP, Anderson ML, Fishman P, et al. Healthcare utilization and costs for women with a history of intimate partner violence. Am J Prev Med. 2007;32(2):89-96. doi: 10.1016/j.amepre.2006.10.001. PMID: 17234483.

41. Decker MR, Frattaroli S, McCaw B, et al. Transforming the healthcare response to intimate partner violence and taking best practices to scale. J Womens Health (Larchmt). 2012;21(12):1222-9. doi: 10.1089/jwh.2012.4058. PMID: 23210490.
42. Futures Without Violence. The evidence behind CUES: an intervention to address intimate partner violence in health settings. http://ipvhealth.org/wp-content/uploads/2021/08/Evidence-for-CUES_1.28.21.pdf.
43. Narula A, Agarwal G, McCarthy L. Intimate partner violence: patients' experiences and perceptions in family practice. Fam Pract. 2012;29(5):593-600. doi: 10.1093/fampra/cms008. PMID: 22327416.
44. Ravi KE, Robinson SR, Schrag RV. Facilitators of formal help-seeking for adult survivors of IPV in the United States: a systematic review. Trauma Violence Abuse. 2022;23(5):1420-36. doi: 10.1177/1524838021995954. PMID: 33685292.
45. Spangaro JM, Zwi AB, Poulos RG. "Persist. persist.": A qualitative study of women's decisions to disclose and their perceptions of the impact of routine screening for intimate partner violence. Psychology of Violence. 2011;1(2):150-62. doi: 10.1037/a0023136.
46. Heron RL, Eisma MC. Barriers and facilitators of disclosing domestic violence to the healthcare service: A systematic review of qualitative research. Health Soc Care Community. 2021;29(3):612-30. doi: 10.1111/hsc.13282. PMID: 33440034.
47. Othman S, Goddard C, Piterman L. Victims' barriers to discussing domestic violence in clinical consultations: a qualitative enquiry. J Interpers Violence. 2014;29(8):1497-513. doi: 10.1177/0886260513507136. PMID: 24323695.
48. Kelly UA. "I'm a mother first": The influence of mothering in the decision-making processes of battered immigrant Latino women. Res Nurs Health. 2009;32(3):286-97. doi: 10.1002/nur.20327. PMID: 19350663.
49. Nelson HD, Bougatsos C, Blazina I. Screening women for intimate partner violence: a systematic review to update the U.S. Preventive Services Task Force recommendation. Annals of internal medicine. 2012;156(11):796-808, w-279, w-80, w-81, w-82. doi: 10.7326/0003-4819-156-11-201206050-00447. PMID: 22565034.
50. Nelson H, Bougatsos C, Blazina I. Screening Women for Intimate Partner Violence and Elderly and Vulnerable Adults for Abuse: Systematic Review to Update the 2004 U.S. Preventive Services Task Force Recommendation. Evidence Synthesis No. 92. AHRQ Publication No. 12-05167-EF-1. Rockville, MD: Agency for Healthcare Research and Quality: 2012. http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/intimate-partner-violence-and-abuse-of-elderly-and-vulnerable-adults-screening?ds=1&s=violence.
51. Haag HL, Jones D, Joseph T, et al. Battered and brain injured: traumatic brain injury among women survivors of intimate partner violence-a scoping review. Trauma Violence Abuse. 2022;23(4):1270-87. doi: 10.1177/1524838019850623. PMID: 31170896.
52. Pritchard AJ, Reckdenwald A, Nordham C. Nonfatal strangulation as part of domestic violence: a review of research. Trauma Violence Abuse. 2017;18(4):407-24. doi: 10.1177/1524838015622439. PMID: 26721886.

53. Smith DJ, Jr., Mills T, Taliaferro EH. Frequency and relationship of reported symptomology in victims of intimate partner violence: the effect of multiple strangulation attacks. J Emerg Med. 2001;21(3):323-9. doi: 10.1016/s0736-4679(01)00402-4. PMID: 11604297.
54. Valera EM, Daugherty JC, Scott OC, et al. Strangulation as an acquired brain injury in intimate-partner violence and its relationship to cognitive and psychological functioning: a preliminary study. J Head Trauma Rehabil. 2022;37(1):15-23. doi: 10.1097/htr.0000000000000755. PMID: 34985030.
55. Ogbe E, Harmon S, Van den Bergh R, et al. A systematic review of intimate partner violence interventions focused on improving social support and/ mental health outcomes of survivors. PLoS ONE. 2020;15(6):e0235177. doi: 10.1371/journal.pone.0235177. PMID: 32584910.
56. Shorey RC, Tirone V, Stuart GL. Coordinated community response components for victims of intimate partner violence: A review of the literature. Aggression and Violent Behavior. 2014;19(4):363-71. doi: 10.1016/j.avb.2014.06.001.
57. Feltner C, Wallace I, Berkman N, et al. Screening for intimate partner violence, elder abuse, and abuse of vulnerable adults: evidence report and systematic review for the US Preventive Services Task Force. JAMA. 2018;320(16):1688-701. doi: 10.1001/jama.2018.13212. PMID: 30357304.
58. Nelson H, Nygren P, McInerney Y. U.S. Preventive Services Task Force Evidence Syntheses, formerly Systematic Evidence Reviews. Screening for Family and Intimate Partner Violence. Rockville, MD: Agency for Healthcare Research and Quality; 2004.
59. Nelson HD, Bougatsos C, Blazina I. U.S. Preventive Services Task Force Evidence Syntheses, formerly Systematic Evidence Reviews. Screening Women for Intimate Partner Violence and Elderly and Vulnerable Adults for Abuse: Systematic Review to Update the 2004 U.S. Preventive Services Task Force Recommendation. Rockville, MD: Agency for Healthcare Research and Quality; 2012.
60. Nygren P, Nelson HD, Klein J. Screening children for family violence: a review of the evidence for the US Preventive Services Task Force. The Annals of Family Medicine. 2004;2(2):161-9. doi: 10.1370/afm.113.
61. Clark HM, Grogan-Kaylor A, Galano MM, et al. Reducing intimate partner violence among Latinas through the Moms' Empowerment Program: An efficacy trial. Journal of Family Violence. 2018;33(4):257-68. doi: 10.1007/s10896-018-9957-4.
62. Ferrari G, Feder G, Agnew-Davies R, et al. Psychological advocacy towards healing (PATH): A randomized controlled trial of a psychological intervention in a domestic violence service setting. PLoS ONE. 2018;13(11):e0205485. doi: 10.1371/journal.pone.0205485. PMID: 30481183.
63. Flaathen EME, Henriksen L, Smastuen MC, et al. Safe Pregnancy intervention for intimate partner violence: a randomised controlled trial in Norway among culturally diverse pregnant women. BMC Pregnancy Childbirth. 2022;22(1):144. doi: 10.1186/s12884-022-04400-z. PMID: 35189843.
64. Galano MM, Stein SF, Grogan-Kaylor AC, et al. Investigating the effects of the Moms' Empowerment Program on 8-year traumatic stress symptom trajectories in women with

histories of IPV. Am J Orthopsychiatry. 2021;91(6):776-88. doi: 10.1037/ort0000577. PMID: 34383515.
65. Hegarty K, Valpied J, Taft A, et al. Two-year follow-up of a cluster randomised controlled trial for women experiencing intimate partner violence: effect of screening and family doctor-delivered counselling on quality of life, mental and physical health and abuse exposure. BMJ Open. 2020;10(12):e034295. doi: 10.1136/bmjopen-2019-034295. PMID: 33303427.
66. Iverson KM, Danitz SB, Shayani DR, et al. Recovering From intimate partner violence through strengths and empowerment: findings from a randomized clinical trial. J Clin Psychiatry. 2021;83(1):21m14041. doi: 10.4088/JCP.21m14041. PMID: 34813687.
67. Kokka A, Mikelatou M, Fouka G, et al. Stress management and health promotion in a sample of women with intimate partner violence: a randomized controlled trial. J Interpers Violence. 2019;34(10):2034-55. doi: 10.1177/0886260516658759. PMID: 27530654.
68. Miller E, Tancredi DJ, Decker MR, et al. A family planning clinic-based intervention to address reproductive coercion: a cluster randomized controlled trial. Contraception. 2016;94(1):58-67. doi: 10.1016/j.contraception.2016.02.009. PMID: 26892333.
69. Van Parys AS, Deschepper E, Roelens K, et al. The impact of a referral card-based intervention on intimate partner violence, psychosocial health, help-seeking and safety behaviour during pregnancy and postpartum: a randomized controlled trial. BMC Pregnancy Childbirth. 2017;17(1):346. doi: 10.1186/s12884-017-1519-x. PMID: 28985722.
70. Zlotnick C, Tzilos Wernette G, Raker CA. A randomized controlled trial of a computer-based brief intervention for victimized perinatal women seeking mental health treatment. Arch Women Ment Health. 2019;22(3):315-25. doi: 10.1007/s00737-018-0895-1. PMID: 30088145.
71. Feder L, Niolon PH, Campbell J, et al. An intimate partner violence prevention intervention in a nurse home visitation program: a randomized clinical trial. J Womens Health (Larchmt). 2018;27(12):1482-90. doi: 10.1089/jwh.2017.6599. PMID: 30311848.
72. Jack SM, Boyle M, McKee C, et al. Effect of addition of an intimate partner violence Intervention to a nurse home visitation program on maternal quality of life: a randomized clinical trial. JAMA. 2019;321(16):1576-85. doi: 10.1001/jama.2019.3211. PMID: 31012933.
73. Sharps PW, Bullock LF, Campbell JC, et al. Domestic violence enhanced perinatal home visits: The DOVE randomized clinical trial. J Womens Health (Larchmt). 2016;25(11):1129-38. PMID: 27206047.
74. Andersson G, Olsson E, Ringsgard E, et al. Individually tailored internet-delivered cognitive-behavioral therapy for survivors of intimate partner violence: a randomized controlled pilot trial. Internet interventions. 2021;26:100453. doi: 10.1016/j.invent.2021.100453. PMID: 34584851.
75. Ford-Gilboe M, Varcoe C, Scott-Storey K, et al. Longitudinal impacts of an online safety and health intervention for women experiencing intimate partner violence: randomized controlled trial. BMC Public Health. 2020;20(1):260. doi: 10.1186/s12889-020-8152-8. PMID: 32098633.

76. Glass NE, Clough A, Messing JT, et al. Longitudinal impact of the myPlan App on health and safety among college women experiencing partner violence. J Interpers Violence. 2022;37(13-14):NP11436-NP59. doi: 10.1177/0886260521991880. PMID: 33576291.
77. Glass NE, Perrin NA, Hanson GC, et al. The longitudinal impact of an internet safety decision aid for abused women. Am J Prev Med. 2017;52(5):606-15. doi: 10.1016/j.amepre.2016.12.014. PMID: 28108189.
78. Hegarty K, Tarzia L, Valpied J, et al. An online healthy relationship tool and safety decision aid for women experiencing intimate partner violence (I-DECIDE): a randomised controlled trial. Lancet Public Health. 2019;4(6):e301-e10. doi: 10.1016/S2468-2667(19)30079-9. PMID: 31155223.
79. Koziol-McLain J, Vandal AC, Wilson D, et al. Efficacy of a web-based safety decision aid for women experiencing intimate partner violence: randomized controlled trial. J Med Internet Res. 2018;19(12):e426. doi: 10.2196/jmir.8617. PMID: 29321125.
80. van Gelder NE, Ligthart SA, van Rosmalen-Nooijens KA, et al. Effectiveness of the SAFE eHealth intervention for women experiencing intimate partner violence and abuse: randomized controlled trial, quantitative process evaluation, and open feasibility study. J Med Internet Res. 2023;25:e42641. doi: 10.2196/42641. PMID: 37368485.
81. Eaton A, Temkin TL, Fireman BH, et al. A description of midlife women experiencing intimate partner violence using electronic medical record information. J Womens Health (Larchmt). 2016;25(5):498-504. doi: 10.1089/jwh.2015.5205. PMID: 26700932.
82. Gerino E, Caldarera AM, Curti L, et al. Intimate partner violence in the golden age: systematic review of risk and protective factors. Front Psychol. 2018;9:1595. doi: 10.3389/fpsyg.2018.01595. PMID: 30233454.
83. Meyer SR, Lasater ME, García-Moreno C. Violence against older women: a systematic review of qualitative literature. PLoS ONE. 2020;15(9):e0239560. doi: 10.1371/journal.pone.0239560. PMID: 32970746.
84. Tetterton S, Farnsworth E. Older women and intimate partner violence: effective interventions. J Interpers Violence. 2011;26(14):2929-42. doi: 10.1177/0886260510390962. PMID: 21156690.
85. Zink T, Fisher BS, Regan S, et al. The prevalence and incidence of intimate partner violence in older women in primary care practices. J Gen Intern Med. 2005;20(10):884-8. doi: 10.1111/j.1525-1497.2005.0191.x. PMID: 16191132.
86. Zink T, Jacobson CJ, Jr., Regan S, et al. Hidden victims: the healthcare needs and experiences of older women in abusive relationships. J Womens Health (Larchmt). 2004;13(8):898-908. doi: 10.1089/jwh.2004.13.898. PMID: 15671705.
87. Miller E, Goldstein S, McCauley HL, et al. A school health center intervention for abusive adolescent relationships: a cluster RCT. Pediatrics. 2015;135(1):76-85. doi: 10.1542/peds.2014-2471. PMID: 25535265.
88. Miller E, Jones KA, McCauley HL, et al. Cluster randomized trial of a college health center sexual violence intervention. Am J Prev Med. 2020;59(1):98-108. doi: 10.1016/j.amepre.2020.02.007. PMID: 32362510.
89. Rivas C, Vigurs C, Cameron J, et al. A realist review of which advocacy interventions work for which abused women under what circumstances. Cochrane Database Syst Rev. 2019;6:CD013135. doi: 10.1002/14651858.CD013135.pub2. PMID: 31254283.

90. Yakubovich AR, Bartsch A, Metheny N, et al. Housing interventions for women experiencing intimate partner violence: a systematic review. Lancet Public Health. 2022;7(1):e23-e35. doi: 10.1016/S2468-2667(21)00234-6. PMID: 34838218.
91. Niolon PH, Kearns M, Dills J, et al. Preventing Intimate Partner Violence Across the Lifespan: A Technical Package of Programs, Policies, and Practices National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Atlanta, GA: 2017.

APPENDIX 1

Search Strategies
January 1, 2016 to April 27, 2023; updated August 22, 2023

Database: Ovid MEDLINE(R) ALL <1946 to April 27, 2023>
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1 exp Intimate Partner Violence/ (13001)
2 Spouse Abuse/ (7570)
3 Battered Women/ (2713)
4 Domestic Violence/ or Elder Abuse/ (10349)
5 ((intimat* or domestic* or romantic* or dating) adj3 partner*).ti,ab. (14701)
6 (spous* or husband* or wife or wives or "common law").ti,ab. (47581)
7 4 and (5 or 6) (1973)
8 1 or 2 or 3 or 7 (15365)
9 ((((intimat* or domestic* or romantic* or dating) adj3 partner*) or spous* or husband* or wife or wives or common law) adj5 (violen* or abus* or assault* or attack* or intimidat* or harass* or crime* or criminal)).ti. (7457)
10 8 or 9 (16602)
11 Mass Screening/ (115873)
12 screen*.ti,ab. (948041)
13 11 or 12 (978359)
14 10 and 13 (2169)
15 Risk Assessment/ (305124)
16 (risk adj3 (predict* or assess*)).ti,ab. (226512)
17 15 or 16 (472829)
18 10 and 17 (720)
19 Treatment Outcome/ (1143935)
20 (treatment or intervention* or counsel*).ti,ab. (6118739)
21 19 or 20 (6635042)
22 10 and 21 (5565)
23 14 or 18 or 22 (7168)
24 Female/ (9579517)
25 women/ or pregnant women/ (28933)
26 (woman or women or girl* or female*).ti,ab. (2514492)
27 24 or 25 or 26 (10008762)
28 23 and 27 (6249)
29 limit 28 to (comparative study or controlled clinical trial or guideline or meta analysis or randomized controlled trial or systematic reviews) (882)
30 limit 29 to yr="2016 -Current" (351)

Database: APA PsycInfo <1806 to April Week 3 2023>

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1 Intimate Partner Violence/ (14454)
2 Battered Females/ (3393)
3 Emotional Abuse/ or Physical Abuse/ or Sexual Abuse/ or Elder Abuse/ (29950)
4 Domestic Violence/ (13226)
5 ((intimat* or domestic* or romantic* or dating) adj3 partner*).ti,ab. (19193)
6 (spous* or husband* or wife or wives or "common law").ti,ab. (41443)
7 (3 or 4) and (5 or 6) (5448)
8 1 or 2 or 7 (18731)
9 ((((intimat* or domestic* or romantic* or dating) adj3 partner*) or spous* or husband* or wife or wives or common law) adj5 (violen* or abus* or assault* or attack* or intimidat* or harass* or crime* or criminal)).ti. (7963)
10 8 or 9 (19141)
11 exp Screening/ (18814)
12 screen*.ti,ab. (116407)
13 11 or 12 (118101)
14 10 and 13 (1341)
15 Risk Assessment/ (15520)
16 (risk adj3 (predict* or assess*)).ti,ab. (30903)
17 15 or 16 (38511)
18 10 and 17 (548)
19 Treatment Outcome/ (39787)
20 (treatment or intervention* or counsel* or psychosocial).ti,ab. (1124773)
21 19 or 20 (1132671)
22 10 and 21 (7223)
23 14 or 18 or 22 (8189)
24 exp Human Females/ (157763)
25 (woman or women or girl* or female*).ti,ab. (687608)
26 24 or 25 (727780)
27 23 and 26 (5381)
28 exp Clinical Trials/ (13564)
29 "Systematic Review"/ or Meta Analysis/ (5995)
30 (random* or control* or trial or "systematic review" or "meta analysis" or "metaanalysis").ti,ab. (987562)
31 28 or 29 or 30 (991094)
32 27 and 31 (1366)
33 limit 32 to yr="2016 -Current" (614)

Database: EBM Reviews - Cochrane Central Register of Controlled Trials <March 2023>

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1 exp Intimate Partner Violence/ (546)
2 Spouse Abuse/ (219)
3 Battered Women/ (74)
4 Domestic Violence/ or Elder Abuse/ (230)
5 ((intimat* or domestic* or romantic* or dating) adj3 partner*).ti,ab. (1259)
6 (spous* or husband* or wife or wives or "common law").ti,ab. (3131)
7 4 and (5 or 6) (68)
8 1 or 2 or 3 or 7 (626)
9 ((((intimat* or domestic* or romantic* or dating) adj3 partner*) or spous* or husband* or wife or wives or common law) adj5 (violen* or abus* or assault* or attack* or intimidat* or harass* or crime* or criminal)).ti. (548)
10 8 or 9 (854)
11 Mass Screening/ (4500)
12 screen*.ti,ab. (87220)
13 11 or 12 (87875)
14 10 and 13 (146)
15 Risk Assessment/ (13493)
16 (risk adj3 (predict* or assess*)).ti,ab. (11560)
17 15 or 16 (23444)
18 10 and 17 (32)
19 Treatment Outcome/ (168761)
20 (treatment or intervention* or counsel*).ti,ab. (1103548)
21 19 or 20 (1150508)
22 10 and 21 (634)
23 14 or 18 or 22 (676)
24 Female/ (577401)
25 women/ or pregnant women/ (1001)
26 (woman or women or girl* or female*).ti,ab. (278052)
27 24 or 25 or 26 (727146)
28 23 and 27 (574)
29 (conference proceeding or clinical trial protocol).pt. (773613)
30 28 not 29 (369)
31 limit 30 to yr="2016 -Current" (184)

Database: EBM Reviews - Cochrane Database of Systematic Reviews <2005 to April 25, 2023>

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1 (intimate partner and (violence or abus*)).mp. (36)
2 "Violence, including relationship violence".kw. (6)
3 "Relationship violence".kw. (8)
4 "*Spouse Abuse/".kw. (5)
5 or/1-4 (37)
6 "Female".kw. (2214)
7 (woman or women or girl* or female*).ti,ab. (1842)
8 6 or 7 (2507)
9 5 and 8 (23)
10 limit 9 to full systematic reviews (23)
11 (2016* or 2017* or 2018* or 2019* or 202*).up. (9007)
12 10 and 11 (21)

APPENDIX 2

Inclusion/Exclusion Criteria

Area (PICOTS)	Inclusion	Exclusion
Population	Adolescent and adult (≥13 years) women without recognized signs and symptoms of IPV*; includes all forms of IPV as defined by the CDC	Children (<13 years); men
Interventions	• Screening instruments (e.g., HITS, PSQ, SAFE-T, OAS, etc.) • Interventions to reduce IPV (e.g., counseling, nurse care management, advocacy interventions, education, skill-based learning, etc.)	Interventions not specific to IPV
Comparators	Usual care, wait list control, no treatment, alternate intervention (head-to-head)	No comparison
Outcomes	• Exposure to subsequent IPV • Mortality • Physical health conditions (e.g., acute injury, chronic pelvic pain) • Mental health conditions (e.g., depression, suicide) • Potential harms of screening or interventions (e.g., retaliation)	Other outcomes
Settings	Primary care relevant health care settings, obstetrics/gynecology clinics	Not applicable to U.S. primary care; settings outside health systems unless explicitly connected, such as through referral
Study design	RCTs, cohort studies with comparison groups	Other study designs

*While women with screen detected IPV is the target population, studies of interventions may not exclusively include this group.

APPENDIX 3

Quality Assessment of IPV Intervention Trials

Author, Year	Randomiz-ation method adequate	Allocation concealment adequate	Groups similar at baseline	Eligibility criteria specified	Outcome assessors masked	Intention-to-treat analysis?	Important loss to follow-up (>20%)	Funding source reported	Quality Rating
Clinic-based and clinic referred interventions									
Clark, 2018	Sequential assignment	Unclear	Yes	Yes	Unclear	Yes	27%; more in control group	University; Blue Shield	Poor
Ferrari, 2018	Yes	Yes	Yes	Yes	Yes	Yes	36%; similar for both groups	UK National Institute for Health Research	Fair
Flaathen, 2022	Yes	Yes	Yes	Yes	Yes	Yes	20.8% overall; 23.6% intervention; 18.1% control	Research Council of Norway	Good
Galano, 2021	Sequential assignment by blocks	Unclear	Yes	Yes	Unclear	No	42.4% intervention; 45.9% control for 8-yr FU	Blue Cross Blue Shield	Poor
Hegarty, 2020	Yes	Yes (cluster randomized)	Yes	Yes	Yes	Yes	41% intervention; 37% control for 24-mo FU	Australian National Health & Medical Research Council	Fair
Iverson, 2022	Unclear	Unclear	Yes	Yes	Unclear	Yes	10% intervention; 3% control	Veteran's Affairs	Fair

Author, Year	Randomiz-ation method adequate	Allocation concealment adequate	Groups similar at baseline	Eligibility criteria specified	Outcome assessors masked	Intention-to-treat analysis?	Important loss to follow-up (>20%)	Funding source reported	Quality Rating
Kokka, 2019	Yes	Unclear	Some differences	Yes	Unclear	Yes	100% FU	None	Fair
Miller, 2016	Yes	Yes (cluster randomized)	Yes	Yes	Unclear	Yes	18% intervention; 23% control	NIH	Good
Van Parys, 2017	Yes	Yes	Some differences adjusted in analysis	Yes	Unclear	Last outcome carried forward; sensitivity analyses	22% intervention; 18% control	Research Foundation Flanders	Good
Zlotnick, 2019	Yes	Unclear	Yes; minor differences	Yes	Unclear	Yes	7% intervention; 8% control	NIH	Fair
Home-visiting IPV interventions									
Feder, 2018	Yes	Unclear	Some differences adjusted in analysis	Yes	Unclear	Yes	18% intervention; 21% control	CDC	Fair
Jack, 2019	Yes	Yes (cluster randomized)	Yes, except race	Yes	Yes	Yes	14.0% intervention; 14.8% control	CDC	Good
Sharps, 2016	Yes	Yes (cluster and individual randomized)	Yes	Yes	Yes	Yes	23% (3 mo) 59% (24 mo) intervention; 25% (3 mo) 50% (24 mo) control	NIH	Fair

Author, Year	Randomiz-ation method adequate	Allocation concealment adequate	Groups similar at baseline	Eligibility criteria specified	Outcome assessors masked	Intention-to-treat analysis?	Important loss to follow-up (>20%)	Funding source reported	Quality Rating
Technology-based interventions									
Andersson, 2021	Yes	Yes	Yes	Yes	Unclear	Yes	34% overall	Ntnl Board of Health and Welfare Sweden	Fair
Ford-Gilboe, 2020	Yes	Yes	Yes	Yes	Yes	Yes	13% intervention; 9.5% control	Canadian Institutes of Research	Good
Glass, 2017	Yes	Yes	Yes	Yes	Unclear	Yes	7% overall	NIH	Good
Glass, 2022	Yes	Yes	Differ by age and coercion	Yes	Yes	Yes	1% intervention; 4% control	NIH	Good
Hegarty, 2019	Yes	Yes	Yes	Yes	Yes	Yes	21% intervention; 20% control	Australian Research Council	Good
Koziol-McLain, 2019	Yes	Yes	Yes	Yes	Yes	Yes	14% intervention; 13% control	New Zealand Health Research Council	Good
van Gelder, 2023	Yes	Single blinded for participants	Yes	Yes	Unclear	Yes	>50% overall; possible selective attrition	Gender & Health Program ZonMw	Poor

U.S. Preventive Services Task Force Quality Rating Criteria

Randomized Controlled Trials (RCTs)

Criteria:

- Initial assembly of comparable groups:
  - Adequate randomization, including first concealment and whether potential confounders were distributed equally among groups.
- Maintenance of comparable groups (includes attrition, crossovers, adherence, contamination).
- Important differential loss to follow-up or overall high loss to follow-up.
- Measurements: equal, reliable, and valid (includes masking of outcome assessment).
- Clear definition of interventions.
- All important outcomes considered.
- Analysis: intention-to treat analysis for RCTs.

Definition of ratings based on above criteria:

Good: Meets all criteria: Comparable groups are assembled initially and maintained throughout the study (follow-up ≥80%); reliable and valid measurement instruments are used and applied equally to all groups; interventions are spelled out clearly; all important outcomes are considered; and appropriate attention to confounders in analysis. Intention-to-treat analysis is used for RCTs.

Fair: Studies are graded "fair" if any or all of the following problems occur, without the fatal flaws noted in the "poor" category below: Generally comparable groups are assembled initially, but some question remains whether some (although not major) differences occurred with follow-up; measurement instruments are acceptable (although not the best) and generally applied equally; some but not all important outcomes are considered; and some but not all potential confounders are accounted for. Intention-to-treat analysis is used for RCTs.

Poor: Studies are graded "poor" if any of the following exists: Groups assembled initially are not close to being comparable or maintained throughout the study; unreliable or invalid measurement instruments are used or not applied equally among groups (including not masking outcome assessment); high attrition; and key confounders are given little or no attention. Intention-to-treat analysis is lacking for RCTs.