



*UK National
Screening Committee*

Screening for partner violence

External review against programme appraisal criteria for the UK National Screening Committee

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Plain English summary

Intimate Partner Violence (IPV) is Domestic Violence and Abuse (DVA) committed by someone who is or has been an intimate partner. IPV is sometimes called “partner violence”. Women and men can cause IPV or be victims of it. IPV occurs in both heterosexual and same sex relationships. It can involve one or many incidents. The most obvious types of abuse involve physical, psychological, sexual, emotional and financial abuse. IPV is associated with a wide range of mental and physical health problems. These problems may happen immediately or after a longer time. IPV is a serious problem which can affect the health of those who experience it.

The UK National Screening Committee has undertaken two other reviews of the evidence on this subject. The Committee currently recommends is that a population screening programme for DVA should not be introduced in the UK. The present review updates the earlier reviews to see if the situation has changed. It is different to the earlier reviews because:

- it focuses on IPV rather than DVA,
- it includes men as victims of IPV
- it includes evidence on sexual orientation, pregnancy and on ethnicity

Several tools have been developed to test for DVA and IPV. These ask questions to find out if an individual is affected by IPV. The most accurate tools have too many questions to be used when there are a lot of people to ask about IPV. There are a number of shorter tools. Some of these show reasonable accuracy. This review found very few studies of these tools and most were in other countries. This made it difficult to know whether the tools would work in the UK.

Ten studies of interventions to reduce exposure to IPV and help those affected by it were considered in this review. None were focused on men. In non-pregnant women most of the studies showed no, or little, effect on important outcomes such as IPV exposure or mental health. In pregnant women there was some evidence of an effect but the studies were small which makes it difficult to be sure. It is important that no studies were performed in the UK. Most were performed in the USA. There are differences in health care systems as well as cultural differences which make it difficult to know if they are relevant to the UK.

The conclusion of this review is that the evidence does not support the introduction of a screening programme which aims to reduce exposure to IPV and help those affected by it. Importantly other organisations such as NICE recommend that that frontline practitioners should be trained to recognise signs of DVA and to respond to it.

Executive summary

Purpose of the review

Intimate Partner Violence (IPV) is a major social and public health issue affecting millions of individuals worldwide. It is a subcategory of domestic violence and abuse (DVA). DVA is defined in the United Kingdom as,

“[Any] incident or pattern of incidents of controlling behaviour, coercive behaviour or threatening behaviour, violence or abuse between those aged 16 or over who are family members or who are, or have been, intimate partners. This includes psychological, physical, sexual, financial and emotional abuse.”¹

IPV is perpetrated by present or past intimate partners; it excludes other family members. IPV is associated with a range of ill-health and occurs in sufficiently large numbers for it to merit being deemed a public health issue on a global scale. In some documents, the category of “Partner violence” is used and we have taken this as equivalent to IPV.

The purpose of this review was to update and expand the previous reviews undertaken for the National Screening Council (NSC) in 2002 and 2013² (at that time, focusing on domestic violence rather than IPV specifically). These reviews concluded that while IPV has significant implications for health, IPV screening does not meet NSC criteria: screening increased identification of those with IPV but was not the only way to do so; screening did not increase uptake of services; and there was a lack of evidence for the effectiveness of interventions for those who had been identified by screening. This evidence now requires an update.

In addition, comments from stakeholders in response to the 2013 review included a desire to explore the existing evidence with regards to partner violence in men, pregnant women and by ethnicity and sexual orientation. The present review provides this additional information where it is available.

Background

Domestic violence and abuse (DVA), of which IPV is a major component, causes considerable morbidity and mortality worldwide. It is weighted towards women,

particularly younger adults, and is also associated with long-term disease or disability and mental health problems. The impacts include physical injury, up to and including homicide, sexually transmitted infections and unwanted pregnancy. Psychological effects include fear, depression, low-self-esteem, drug and alcohol abuse, and suicide.

Multiple tools have been developed to screen for IPV including at least two which are considered to be gold-standards (Conflict Abuse Scale (CAS) and Conflict Tactic Scale-2 (CTS-2); both are quite long, however, and are probably impractical to administer in many health care areas. There are many shorter tools, from one to four items. Similarly, a number of interventions have been tested. However, the last NSC review concluded that no single tool or single intervention could be recommended.

NICE has produced public health guidance [PH50] and a quality standard [QS116] on DVA. These recommend that frontline staff are trained to recognise DVA indicators and to ask relevant questions to support disclosure and effective responses. In addition, they recommend routine questioning about DVA in specific areas such as antenatal, postnatal, reproductive care, sexual health, alcohol or drug misuse, mental health, children and vulnerable adults' services. In this review, these areas, and also Emergency Department (ED), also called Accident and Emergency (A&E), are deemed high-risk areas. Routine screening does not take place in low-risk areas, such as general practice and most outpatient clinics.

Focus of the review

In the main, the present review focuses on low-risk areas, being specifically interested in whether routine screening of the type practiced in high-risk areas should be adopted in low-risk areas. However, as the present review also includes pregnant women, it does include high-risk areas which serve only pregnant and postnatal women, such as obstetric care.

The key questions for the review are:

1. What is the prevalence of IPV in the UK in women and men? (Screening criterion 1);
2. How accurate are partner violence screening tools in women and men? (Screening criterion 4);

3. What is the reported effectiveness of interventions after partner violence is disclosed by men and women? (Screening criterion 9).
4. What is the reported effectiveness of partner violence screening for men and women in a healthcare setting? (Screening criterion 11 and 13);

For each question, identified literature includes evidence where available related to sub-groups: pregnant women, sexual orientation and ethnicity. Question 1 used data from the UK only. Questions 2 to 4 used data from countries deemed sufficiently equivalent; these were the so-called “big five” geographic areas: UK and Ireland; USA, Canada, Australia and New Zealand. The literature reviewed was published between 2007 and 2018; the literature included varied by question: for questions 2 and 3 the same search was used in order to find primary research related to screening accuracy and effectiveness. For question 4, primary research on interventions undertaken after positive screening in a health care area were searched for. For question 1, diverse official statistics and primary research articles on prevalence were used. Database searches yielded the following:

On prevalence (criterion 1): 773 records were returned, of which 47 were obtained as full text for further assessment; 16 of these were eligible.

On accuracy (criterion 4): 5912 records were returned, of which 40 were obtained as full text for further assessment and 4 were eligible to criterion 4.

On effectiveness of interventions (criterion 9): 6825 records were returned, of which 22 were obtained as full text for further assessment; 10 were relevant.

On effectiveness of screening (criterion 11 & 13): the same search criteria were used as for “on accuracy”. Hence, 5912 records were returned, of which 40 were obtained as full text for further assessment and 4 were eligible to criteria 11 & 13.

Recommendation under review

The recommendation of the previous review was (p, 16):

“There is insufficient evidence for the introduction of the population screening programme for domestic violence. Intimate partner violence is a common and important issue with significant implications for the health of individuals and their families and also the health, social and legal services. Screening for partner violence does not meet the NSC criteria in the UK. Screening may increase the identification of such violence, but it is not the only way to increase identification and does

not improve the uptake of services. Other methods of increasing referrals appear to be as effective. There is a lack of evidence on effective interventions for those who do identify themselves.”²

This recommendation is not to offer population screening and was last updated in 2013, a further update is now required. As well as updating the evidence from the last review, which exclusively concerned women, the present review also sought evidence on men, ethnic groups, and sexual orientation.

Findings and gaps in the evidence of this review

An overview of the findings includes the following:

On prevalence

a) In the general population, despite differing methods of police recording of crimes, there are a large number of serious incidents of IPV (i.e. those where there is risk of harm and injury) in all four countries of the UK; the most common relate to some form of violence against the person. The lowest prevalence population figure for IPV (or equivalent, e.g. ‘partner violence’) over a lifetime was 12.1% (in Northern Ireland); Scotland had a figure of 14.1% with England highest at 23.5% (Wales figure not available; data taken from crime surveys).

The gender breakdown data on IPV is incomplete. Using the crime survey figures, however, the rate of lifetime IPV for women and men in England is 28.9% against 13.2%; in Scotland it is 18.5% against 9.2%; and in Northern Ireland it is 15.1% against 8.4%. This proportion varies by type of IPV with, for example, women far more likely to suffer sexual IPV.

There seems to be no clear pattern of abuse based on ethnicity; data^a is lacking in some geographical areas.

The review found no data on the prevalence of IPV in pregnant women in the general population; this is a gap in the evidence, although evidence from pre- and perinatal clinics probably provides a reasonable substitute.

^aThroughout the document the term “data” is treated as a mass noun and thus as a singular; this is more idiomatic than treating it as the plural of datum and more consistent across a range of usage; for example, it is unidiomatic to ask “what do the data show?” rather than “what does the data show?” and unidiomatic to respond “They show ...” rather than “It shows...”.

There is little data from police and crime survey sources on IPV related to sexual orientation. The Scottish police statistics, however, do include this data. The proportion of the total of incidents of partner abuse in 2017-18 was male/male (2%) and female/female (1%). A survey performed within the gay community found that around 40% of gay and bisexual men had suffered IPV, of which 96% was from male partners. Around 25% of lesbians had suffered IPV, of which two-thirds was from a female partner.

In clinical populations: all but one of the studies reviewed concerning prevalence were conducted in areas related to sexual health and HIV, with most taking place in the south of England. Rates of lifetime IPV were up to 52% and for one-year IPV, 17.4%. A survey across community gynaecology, genitourinary medicine (GUM) and HIV clinics in London found much lower rates, with 7.1% lifetime domestic violence.

In terms of pregnancy, one study compared IPV at a gynaecology clinic against a termination of pregnancy clinic, finding rates of one-year abuse to be much higher in the former (10.7%) than the latter (2.7%).³

There is little data on ethnicity, although one study of a London GUM clinic found the broad ethnic group, “Black”, had a statistically significant increased risk of one-year IPV compared to the “White British” group (Odds Ratio (OR) 5.43; 95% Confidence Interval (CI) 2.37% to 12.55%).⁴

On sexual orientation, a survey of gay men attending a sexual health clinic in London found a prevalence of “negative behaviour” from a partner (which was broadly similar to a definition of IPV) to be, lifetime 33.9%.⁵

One study conducted outside of sexual health-related areas found a lifetime prevalence of IPV (around 23%) and one-year (8%). These levels of IPV are similar to those in the police and crime survey statistics.⁶

On accuracy of screening

Seven screening tools had been used as either reference standard or as an index test. These were:

- Composite Abuse Scale (CAS): 30 items assessing physical, emotional and combined abuse and harassment

- Conflicts Tactic Scale-2 (CTS-2): the original CTS was 80 items assessing intra-family conflict and violence; the CTS-2 has 39 items, but each is asked about the participant and the partner, making 78 in total; CTS2 has ten items
- Gay Abuse Screening Protocol (GASP): an adaptation of WAST specifically aimed for use with gay men
- Humiliation, Afraid, Rape, Kick (HARK): 4 items assessing emotional and physical IPV in the past year
- Hurt/Insult/Threaten/Scream (HITS): 4 items assessing frequency of current IPV
- Parent Screening Questionnaire (PSQ): 3 items assessing physical IPV in the last year plus current safety
- Woman Abuse Screening Tool (WAST): 8 items assessing physical and emotional IPV; 3 items assessing physical IPV in the past year and historically

The most common index tools used were CTS-2 and CAS. Both can be considered ‘gold standard’ and well established but long. The comparators tended to be much shorter three- or four-item tools designed to be administered more quickly in clinical areas where the gold-standard tools were thought impractical. Some of the studies compared the means of administration of a particular tool, rather than one tool against another; largely these were comparisons of face-to-face interview with computer-assisted self-interview. Only one study was UK-based.⁷ This was based in general practice and found the Humiliation, Afraid, Rape, Kick (HARK) tool to have performed well against CAS with sensitivity 81% (95% CI 69% to 90%), specificity 95% (95% CI 91% to 98%), PPV 83 (70-91) and NPV (90-97). Data from the remaining studies in the ‘big five’ regions provides weak evidence for HARK, Parent Screening Questionnaire (PSQ) and Hurt, Insulted, Threaten, Scream (HITS) as being able to identify women experiencing recent IPV. Overall, there remains insufficient evidence to support any particular mode of administration; the data was conflicting.

No tools were particularly designed for pregnant women; one study compared modes of administration of a locally-developed tool, but found no significant differences between these modes; no information was provided for the accuracy of the tool.

No study focused on ethnicity.

One tool was designed for administration in gay male relationships, although it was closely based on another, widely used, tool. From a small sample, this found sensitivity 40%, specificity 95.5%, PPV 80% and NPV 77.8%. The study also found clients and professionals to be comfortable with the tool. It was also the only study exploring a screening tool in an exclusively male population.

On effectiveness of interventions

8 of the 10 studies reviewed came from the USA, the rest from Australia. All studied women-only, with five focusing on pregnant women. All participants had screened positive for IPV or were considered at high risk for IPV. The non-pregnant women were recruited from primary care and family planning clinics, the pregnant women, from pre-and antenatal clinics. The interventions varied, including highly intensive home visits, counselling during clinic visits, advocacy, counselling plus phone calls and a computer-based motivational intervention.

In terms of reducing IPV exposure, there is little statistically significant difference between intervention and control groups, although where there are tendencies these favour the intervention groups. One set of researchers caution against using IPV exposure as an outcome as they say it is unlikely to change significantly in the period of a RCT.

Some statistically significant differences favoured the intervention groups in terms of knowledge of IPV resources, safety-promoting behaviours, the use of resources and self-efficacy. These improvements were found through more than one type of intervention, for example, from counselling, education and advocacy. Against this, the large and well-conducted WEAVE study of screening and counselling found no significant difference in relation to having a safety plan or five safety behaviours at six or twelve months.⁸

Some studies measured the impact of the intervention on depressive symptoms but only one, testing an advocacy intervention, found any statistically significant difference. Similarly, there were no statistically significant differences found in quality of life measurement, although this was only performed in one study.

Five papers reported 4 studies that enrolled pregnant or postpartum women. Following interventions, these reported statistically significant differences relating to a reduction in IPV exposure and in improved mental health outcomes. The interventions varied from quite intensive CBT and counselling, to a brochure-based empowerment tool delivered during routine health visits.

There was no data relating to the effectiveness of interventions for men, specific ethnic groups or by sexual orientation.

On effectiveness of screening

Four papers were reviewed, reporting two studies that tracked outcomes for women who had been screened. The largest was a 3-year longitudinal study of 2700 women seeking primary care services who had been screened using the 3-item PVS by computer-assisted self-interview compared with two other groups who received no screening although one received some IPV-related resources. No significant differences of clinical importance were found across the three groups at 1-year or at 3-years. A smaller study also found no significant differences of clinical importance in relation to screening plus a brief intervention if positive.

No data reviewed addressed pregnancy, ethnicity or sexual orientation.

There is little data on possible harms.

Recommendations on screening

IPV is an important health problem that affects large numbers of women (pregnant or not) and men, across ethnicities and sexual orientation. It is a policing problem but also a health problem in that it has serious public health consequences.

Screening for IPV is possible and there are a number of tools that can be used; the longer, gold-standard tools may be impractical in many health care areas but there are shorter tools which report good sensitivity and specificity. There is insufficient data, however, particularly from the UK, to recommend the use of any single one of these.

At present there is insufficient data to show that screening at population level, including the so-called low risk groups in areas like general practice, or in antenatal care, is effective in terms of health outcomes.

There is also insufficient data to recommend any particular intervention among those who screen positive. Pregnant and postpartum women constitute a group in which interventions appear most promising. At present, however, there is

insufficient evidence to change the recommendation against population level screening for IPV.

Limitations

The peculiarities of IPV require consideration. Screening for IPV differs from screening for most other health conditions as the person screened will usually know they have the ‘condition’ and screening aims to get them to pass that information on to the health care team. Furthermore, the ‘condition’ involves the, sometimes criminal, behaviour of the partner; it may also involve both parties, an area which is little investigated in the literature reviewed. The need to consider which outcomes can realistically be found in an RCT should also be considered, with at least one group of researchers concerned that reduction in violence is unlikely to be achieved in the lifetime of an RCT.

Evidence uncertainties

The main issue is a shortfall of research, noted in many of the papers. For example, more research is needed on almost all aspects of screening for IPV in the UK, from where there is currently little data. More widely, there is less evidence related to populations such as men and LGBT people, and little detail on black and minority ethnic (BME) communities, and on older people. There is insufficient detail in most studies regarding possible harms as well as benefits of screening. There is also a technical issue raised in one report regarding what outcomes can reasonably be expected from screening and related interventions: should it be the behaviour and knowledge of those at risk, for example, or actual rates of IPV; the latter may be hard to detect within the timescale of most studies.

Introduction and approach

Background

Domestic violence and abuse (DVA), is a global health and societal issue that causes considerable morbidity and mortality.⁹ It is defined in the UK as *“any incident or pattern of incidents of controlling, coercive, threatening behaviour, violence or abuse between those aged 16 or over who are, or have been, intimate partners or family members regardless of gender or sexuality. The abuse can encompass, but is not limited to psychological, physical, sexual, financial or emotional.”*¹ This definition also encompasses acts of ‘honour’ based violence, female genital mutilation (FGM) [cutting] and forced marriage. DVA is a complex issue and can manifest itself in several forms, including child abuse, elder abuse and intimate partner violence (IPV). IPV is DVA by a current or former intimate partner; it is one of the most prevalent forms of DVA and this review will be focusing only on IPV. Several sociodemographic and clinical factors that increase the risk of experiencing IPV. These include being female, aged 16 to 24 for women or aged 16 to 19 for men, long-term disease or disability, mental health problems, women separated from partner, pregnant or post-partum^b women.¹⁰⁻¹³

IPV is associated with serious physical and psychological consequences for not only the victim, but others in the family such as children.¹⁴ A previous review for the NSC, published in 2013² drawing on a systematic review¹⁵ reported a lifetime prevalence (of domestic violence, not IPV specifically) in the general population of 13 to 41%, and in the clinical population of 22 to 35%. A more recent Cochrane review reporting data from the British Crime Survey suggested that in the 2012/13 period, 4.4% of men and 7.1% of women experienced IPV.¹⁶

According to World Health Organization (WHO) approximately 42% of women who experience physical or sexual IPV, sustain injuries as a result.⁹ The examples of minor physical effects may include cuts, punctures, bruises and bites. Severe injuries may result in permanent disability (e.g. loss of limb, hearing loss, damage to teeth). IPV victims report higher rates of poor health, compromised ability to walk, pain, vaginal discharge, loss of memory and dizziness and self-harm.^{17, 18} Other examples of the impact of sexual IPV include

^b women who have recently given birth

unwanted pregnancy, miscarriage, sexually transmitted infections (STI) and other gynaecological problems.¹⁹⁻²¹

Psychological effects of IPV may include fear, depression, low self-esteem, anxiety disorders, depression, headaches, obsessive-compulsive disorder, post-traumatic stress disorder, low self-esteem, disassociation, sleep disorders, shame, guilt, self-mutilation, drug and alcohol abuse and eating disorders. Psychological consequences may also manifest through psychosomatic symptoms, sexual dysfunction and eating problems.^{22, 23} In addition, IPV can have fatal consequences for victims resulting from homicide or suicide.^{9, 19} Similar side effects are reported by victims of female perpetrated violence (with exception to gynaecological symptoms) or those in a same sex relationship.

1.1 Screening tools

A wide range of tools or questionnaires have been developed to screen for IPV. A 2009 HTA systematic review found 18 screening tools for women, many of which were valid and reliable for use in healthcare settings, although none had been tested in the UK.¹⁵ The Hurts, Insults, Threatens and Screams (HITS) scale was the most accurate of the available tools, with a sensitivity ranging from 86% to 100% and a specificity from 86% to 99% against the reference standard of Index of Spouse Abuse- Physical (ISA-P) plus Woman Abuse Screening Tool (WAST).¹⁵ However, there is no gold standard tool for use in the UK. In addition, the available screening tools and their accuracies have not been reviewed in male populations or in couples in same sex relationships in the UK. Another 2009 systematic review found a very limited evidence base with conflicting sensitivity and specificity studies. For example, only two studies assessing the HITS tool in exclusively male populations in the US.²⁴ One of these, analysing data from several USA studies, found a sensitivity and specificity of 88% and 97%, respectively,²⁵ whereas the other found a drastically lower sensitivity of 30% to 46% in mainly African-American men.²⁶ The context in which individuals are screened, together with the professional skills, knowledge and training are all key factors that may contribute to the outcomes of screening tests. It is important to review the tools available for IPV screening and assess how well they perform in the UK context for all men and women in heterosexual and same-sex relationships and in those with limited English proficiency.^c

^c Limited ability to speak English

1.2 Interventions

A range of possible IPV interventions are available focussing both on the victim and the perpetrator.¹⁵ Victims can be offered counselling and psychological therapy to give them confidence and encourage them how to avoid abuse or be referred to shelters, social workers and other community-based resources,²⁷ while perpetrators can be referred to treatment programmes.²⁷ However, previous reviews have found a lack of clear evidence on the effectiveness of these interventions.^{15, 28-30} Better evidence is needed in order to understand the particular interventions that work for whom, when and in what context.¹⁵

Current policy context and previous reviews

Currently in the UK, there is a public health guideline [PH50] and a quality standard [QS116] on DVA published by NICE.^{1, 13} These national documents cover planning and delivery of high-quality multi-agency services to help identify, prevent and reduce partner violence. With respect to identification, the guidelines recommend that frontline staff in all services should be trained to recognise DVA indicators and ask relevant questions to help disclosure. However, for users of the following health services, the guideline also recommends routine questioning about DVA, even where there are no indicators of such violence and abuse: antenatal, postnatal, reproductive care, sexual health, alcohol or drug misuse, mental health, children's and vulnerable adults' services (NICE PH50 Recommendation 6).^{1, 13} The evidence supporting this recommendation is not immediately obvious but seems to relate to the likelihood of increasing rates of disclosure in (some) of those areas.^{1, 13, 15, 31} Feder et al¹⁵ caution against drawing firm conclusions on prevalence rates both in the community and in clinical areas. With regard to the latter, however, they cautiously suggest that women attending accident and emergency (A & E) have the highest prevalence and women attending antenatal clinics, the lowest.¹⁵

This present review focuses on health care settings that are not generally reported as high risk, in other words, settings such as general practice (GP) and out-patient clinics. This decision is driven partly by the fact that the NICE guidelines already recommend routine questioning in other clinics that would tend to be viewed as high risk (although the evidence here is limited). The UK NSC already has a recommendation on screening in the perinatal population, and this review provides an update here also.

In addition, the NICE guidelines suggest creating an environment to enable disclosures of DVA, for example, by displaying information in waiting areas and suitable places about support available in a range of formats and languages; ensuring frontline staff know or have access to, information about the services, policies and procedures of local agencies; and providing a private, safe and sensitive environment to facilitate disclosure. To prevent and reduce DVA, the guidelines recommend that service providers should establish a formal referral pathway to specialist DVA agencies.

In 2002, the UK NSC commissioned a review³² that sought to assess the acceptability and effectiveness of screening women for DVA in healthcare settings. The review involving 20 papers concluded that screening programmes in healthcare settings could not be justified due to insufficient evidence regarding the benefit of specific interventions and the lack of harm from screening. In April 2012 a second review was undertaken for the UK NSC² using updated criteria from the UK NSC for appraising the viability, effectiveness and appropriateness of a screening programme for domestic violence, now termed intimate partner violence (IPV) against women; although the report noted the existence of IPV against men, it did not examine it. The report examined literature published between 1st January 2007 and the 1st February 2012 and concluded:

- IPV results in significant health problems for the victims and related children.
- There was an intervention that could be implemented in primary care to increase referral to specialist services and that this was thought to be cost effective; the intervention was called the IRIS model³³ and is a programme of training and support for primary healthcare practices to increase identification of women experiencing IPV and their referral to specialist services.
- There were a wide range of candidate screening tools, some of which were valid and appropriate for specific circumstances, but none of which had been tested in a UK healthcare setting; as such, no single tool could be said to be appropriate for use in the UK.
- There was evidence that screening programmes can increase the level of disclosure and identification, however, there was insufficient evidence of reduction in IPV or positive health outcomes following screening.
- There was a reasonable level of acceptability for screening from women, but it varied according to healthcare setting and individuals' circumstances, and clinicians internationally and in the UK did not consider it acceptable.
- There was a range of interventions for IPV but a lack of clear evidence on their effectiveness.
- There was limited evidence that screening for IPV does not cause harm.

The previous report concluded:

“There is insufficient evidence for the introduction of the population screening programme for domestic violence. Intimate partner violence is a common and important issue with significant implications for the health of individuals and their families and also the health, social and legal services. Screening for partner violence does not meet the NSC criteria in the UK. Screening may increase the identification of such violence, but it is not the only way to increase identification and does not improve the uptake of services. Other methods of increasing referrals appear to be as effective. There is a lack of evidence on effective interventions for those who do identify themselves.”²

As the previous review was conducted over four years ago, the policy recommendation on partner violence screening for women needs to be updated. Furthermore, partner violence screening for men needs to be assessed, something not attempted in the previous review.

Objectives

The objective of the current review was to summarise the evidence on the key issues for IPV screening for men and women across healthcare settings. A further objective was to gauge significant developments in the IPV evidence base on key questions. Therefore, this review focused on describing the evidence related to the following key questions in both men and women:

1. What is the prevalence of IPV in the UK in women and men?
2. How accurate are partner violence screening tools in UK women and men?
3. What is the reported effectiveness of interventions after partner violence is disclosed by men and women?
4. What is the reported effectiveness of partner violence screening for men and women in a healthcare setting?

These questions were developed by the UK NSC and the UK NSC criteria that they relate to are presented in

Table 1 below.

Table 1. Key questions for the evidence summary, and relationship to UK NSC screening criteria

Criterion	Key questions	Studies Included
THE CONDITION		
1 The condition should be an important health problem as judged by its frequency and/or severity. The epidemiology, incidence, prevalence and natural history of the condition should be understood, including development from latent to declared disease and/or there should be robust evidence about the association between the risk or disease marker and serious or treatable disease.	Q 1. What is the prevalence of IPV in men and women?	16 + (6 reports)
THE TEST		
4 There should be a simple, safe, precise and a validated screening test.	Q2. How accurate are partner violence screening tools in UK women and men?	4
THE INTERVENTION		
9 There should be an effective intervention for patients identified through screening, with evidence that intervention at a pre-symptomatic phase leads to better outcomes for the screened individual compared with usual care. Evidence relating to the wider benefits of screening, for example, those relating to family members, should be taken into account where available. However, where there is no prospect of benefit for the individual screened then the screening programme shouldn't be further considered.	Q3. What is the reported effectiveness of interventions after partner violence is disclosed by men and women in a health care setting?	10
THE SCREENING PROGRAMME		
11 There should be evidence from high quality randomised controlled trials that the screening programme is effective in reducing mortality or morbidity. Where screening is aimed solely at providing information to allow the person being screened to make an "informed choice" (e.g. Down's syndrome, cystic fibrosis carrier screening), there must be evidence from high quality trials that the test accurately measures risk. The information that is provided about the test and its outcome must be of value and readily understood by the individual being screened.	Q4. What is the reported effectiveness of partner violence screening for men and women in a healthcare setting?	4
13 The benefit gained by individuals from the screening programme should outweigh any harms for example from over diagnosis, overtreatment, false positives, false reassurance, uncertain findings and complications.	Q4. What is the reported effectiveness of partner violence screening for men and women in a healthcare setting?	4 (as above)

Methods

The current review was conducted by University of Sheffield (School of Nursing and Midwifery and SChARR) in keeping with the UK NSC [evidence review process](#). Database searches were conducted on 18th October 2018 to identify studies relevant to the questions detailed in Table 2.

Eligibility for inclusion in the review

The following review process was followed:

1. Each abstract was reviewed against the inclusion/exclusion criteria by one reviewer. Where the applicability of the inclusion criteria was unclear from the abstract, the article was included at this stage in order to ensure that all potentially relevant studies were captured.
2. Full text articles necessary for the full text review stage were acquired.
3. Each full-text article was reviewed against the inclusion/exclusion criteria by one reviewer, who determined whether the article was relevant to one or more of the review questions.
4. A random 20% of the abstracts and 20% of the full text articles were also sifted by a second reviewer to assure the quality of the process.
5. Any queries at the abstract or the full text stage were resolved through discussion with a second reviewer.

Eligibility criteria for each question are presented in Table 2 below. For question 1 only, surveillance reports, information published by the Office for National Statistics and research studies published between January 2007 and September 2018 were considered eligible for inclusion for women.

We were required to include studies on men (for all four questions) without date limits. To achieve this, we conducted separate searches for men only for all questions prior to 2007. A sample of 1000 search results were reviewed (title and abstract) to determine the number of studies identified. However, only a small number of studies (n=4) were identified which were then found to be irrelevant and therefore were excluded. The Prevalence search was also limited to UK studies using a validated study filter from NICE*. Government surveys did not cover IPV specifically prior to 2007 and so we only included data from the most recent publications, some of which included data on domestic violence (not IPV specifically) going back to 2005.

Table 2. Inclusion and exclusion criteria for the key questions.

Key question	Inclusion criteria						Exclusion criteria
	Population	Target condition	Intervention	Comparator	Outcome	Study type	
<p>What is the prevalence of partner violence in the UK in women and men?</p> <p>a) The prevalence of IPV in women and men in the UK;</p> <p>b) The prevalence of IPV in pregnant women in the UK;</p> <p>c) The prevalence of IPV stratified by sexual orientation and ethnicity in the UK.</p>	<p>Women aged 16 and above; Men aged 16 and above; pregnant women</p>	<p>IPV</p>	<p>N/A</p>	<p>N/A</p>	<p>Prevalence of partner violence</p>	<p>Cross-sectional studies, cohort studies, systematic reviews, Office for National Statistics and other relevant surveillance reports</p>	<p>Studies involving children aged 16 and under; Studies published prior to 2007 (for women); Literature review, narrative reviews, commentaries, editorials; studies conducted outside UK</p>
<p>How accurate are partner violence screening tools in UK women and men?</p> <p>a) what is the reported accuracy of available IPV screening tools in women and men in the UK;</p>	<p>Men and women aged 16 and above previously not known to be experiencing IPV</p>	<p>IPV Reference standard: Partner violence-associated injuries, verified or</p>	<p>Index test: Screening tools/questionnaires designed to detect current/ past IPV, including self-administered, computer-enabled or patient self-report</p>		<p>Sensitivity, specificity, positive predictive value, negative predictive value.</p>	<p>Cross-sectional studies, cohort studies, systematic reviews; Studies conducted in</p>	<p>Literature review, narrative reviews, commentaries, editorials; Studies published prior to 2007 (for</p>

<p>b) What is the reported accuracy of available IPV screening tools for pregnant women in the UK;</p> <p>d) What is the reported accuracy of available IPV screening tools stratified by sub-groups, such as sexual orientation and ethnicity, and by setting, such as GP practice or Antenatal clinic, in the UK</p>	<p>self-reported abuse or validated (high sensitivity and specificity) screening instrument for abuse.</p>	<p>instruments, and clinician-administered screening methods, such as HITS tool.</p>		<p>the UK, Republic of Ireland, Canada, USA, New Zealand, Australia</p>	<p>women); Non-English language; Studies conducted outside the big 5.</p>		
<p>What is the reported effectiveness of interventions after IPV is disclosed by men and women?</p> <p>a) What is the effectiveness of interventions after IPV is disclosed by women and men in health setting in the UK;</p> <p>b) What is the effectiveness of interventions after IPV is disclosed by pregnant women in antenatal care in the UK; and</p> <p>d) What is the effectiveness of interventions after IPV is disclosed, stratified by sub-groups, such as</p>	<p>People aged 16 and above who have disclosed IPV in a healthcare setting</p>	<p>IPV</p>	<p>Any intervention used once IPV is disclosed in a healthcare setting</p>	<p>None or different intervention</p>	<p>Primary outcomes:</p> <p>a) Reduced episodes of violence (physical, sexual, and/or psychological);</p> <p>b) Prevention of violence as defined by the authors of trials (e.g. during pregnancy, one year after screening or first visit etc.); and</p> <p>c) Adverse events from intervention, such as increased abuse or other forms of retaliation,</p>	<p>Randomised controlled trials, quasi-experimental studies, cohort studies, systematic reviews; Studies conducted in the UK, Republic of Ireland, Canada, USA, New Zealand, Australia</p>	<p>Studies involving 16 and under; studies with no control; Studies published prior to 2007 (for women) Literature review, narrative reviews, commentaries, editorials; Studies conducted on Non-English language; Studies conducted outside the</p>

sexual orientation and ethnicity, and by setting of disclosure such as GP practice or antenatal care, in the UK.

emotional distress, labelling, stigma.

Secondary outcomes

d) Physical and psychological morbidity, e.g. physical trauma such as fractures and dislocations, chronic medical conditions, acute mental morbidity such as stress and nightmares, chronic mental health conditions such as PTSD, anxiety and depression and sexual trauma, unintended pregnancy, sexually transmitted diseases;

e) Mortality;

f) Maternal outcomes such as miscarriage, antepartum haemorrhage, premature labour, abruptio placenta;

UK, Republic of Ireland, Canada, New Zealand, Australia

- g) Neonatal outcomes such as birthweight, APGAR score first minute, APGAR score fifth minute, stillbirth, perinatal death;
- h) Children’s safety and well-being; and
- i) Quality of life, social isolation and self-esteem

<p>What is the reported effectiveness of IPV screening for men and women in a healthcare setting?</p>	<p>Men and women aged 16 and above previously not known to be experiencing IPV</p>	<p>IPV</p>	<p>Partner screening</p>	<p>violence</p>	<p>Usual care/ none</p>	<p>Reduced episodes of IPV (physical, sexual, psychological) Prevention of IPV as defined by the authors of trials (e.g. during pregnancy, one year after screening or first visit etc.); Adverse events from intervention, such as increased abuse or other forms of retaliation, emotional distress, labelling, stigma.</p>	<p>Randomised controlled trials, Quasi-experimental studies, Cohort studies, Systematic reviews; Studies conducted in the UK, Republic of Ireland, Canada, USA, New Zealand, Australia</p>	<p>Studies involving children 16 and under; Literature review, narrative reviews, commentaries, editorials; Studies published prior to 2007 (for women); Non-English language; Studies conducted outside big 5 countries.</p>
<p>a) What is the effectiveness of IPV screening for men women in a health setting;</p>								
<p>b) What is the effectiveness of IPV screening for pregnant women in antenatal care;</p>								
<p>c) What is the effectiveness of IPV screening stratified by sub-groups, such as sexual orientation and</p>								

ethnicity, and by setting such as GP practice or antenatal care, in the UK.

Secondary outcomes
Identification of IPV;
Information giving and referrals to support agencies (including take-up rates when available);
Physical and psychological morbidity, e.g. physical trauma such as fractures and dislocations, chronic medical conditions, acute mental morbidity such as stress and nightmares, chronic mental health conditions such as PTSD, anxiety and depression and sexual trauma, unintended pregnancy, sexually transmitted diseases;
Mortality;
Maternal outcomes such as miscarriage, antepartum

haemorrhage,
premature labour,
abruptio placenta;
Neonatal
outcomes such as
birthweight,
APGAR score first
minute, APGAR
score fifth minute,
stillbirth, perinatal
death;
Children's safety
and well-being;
and
Quality of life,
social isolation
and self-esteem

For the remaining questions, papers reporting studies conducted in five countries, termed the big five in this report (UK and Ireland, USA, Canada, Australia, New Zealand), published in English peer reviewed journals between January 2007 to September 2018 (for women; no date limit for men) were eligible for consideration in the review. The big five countries were deemed to have sufficient cultural, health service and language similarities for the results to be relevant to the UK.

A total of 14,537 unique references were identified and sifted by an information scientist by title and abstract for potential relevance to the review. Of the unique references identified 12,456 titles and abstracts were reviewed by the reviewers for further appraisal and possible inclusion in the final review. Overall, 109 studies were identified as possibly relevant during title and abstract sifting and further assessed at full text. In addition, 6 reports related to national level statistics; 2 each for England and Wales,^{34, 35} Northern Ireland^{36, 37} and Scotland^{38, 39} were also included for question 1.

Nineteen systematic reviews and meta-analyses were found.^{15, 16, 24, 40-55} None of these syntheses had specifications sufficiently close to the present review to be included; typically, their time frame was too early or their geographical scope was too wide. However, their citations were checked; the PRISMA charts for this review shows where additional studies were found. In addition, where possible the reviews were checked alongside the present one for consistency of data extraction.

Appraisal for quality/risk of bias tool

The following tools were used to assess the quality and risk of bias of each study included in the review:

- Diagnostic accuracy studies: CASP checklist for Diagnostic Test Study⁵⁶
- Randomised controlled trials (RCTs): CASP checklist for RCT⁵⁷
- Cross-sectional studies: Appraisal tool for Cross sectional (AXIS) tool⁵⁸

The quality assessment and data extraction were conducted by one reviewer and a random 10% of assessments were checked by a second reviewer. The

results of the quality assessments are presented in the summary and appraisal of individual studies in Appendix 3.

Databases/sources searched

A systematic search of four databases (Medline, PsycINFO, Embase and The Cochrane Library) was conducted in October 2018 using 3 separate search queries to identify studies relevant to the questions detailed in Table 1. The search strategies are presented in Appendix 1. The full list of excluded papers, and reasons for exclusion are in Appendix 2.

Question level synthesis

Criterion 1 – Prevalence of condition

The condition should be an important health problem as judged by its frequency and/or severity. The epidemiology, incidence, prevalence and natural history of the condition should be understood, including development from latent to declared disease and/or there should be robust evidence about the association between the risk or disease marker and serious or treatable disease.

Question 1 – What is the prevalence of partner violence in the UK in women and men?

The previous review conducted in 2013² only explored the prevalence of DVA in women. A systematic review¹⁵ conducted earlier reported a lifetime prevalence (of DVA, not IPV specifically) in the general population of 13 to 41%, and in the clinical population of 22 to 35%. While the number of women experiencing IPV and sustaining physical and psychological effects is greater, men can also be victims of IPV perpetrated by their female partners. In addition, IPV can be present in same sex relationships. The previous review did not report on prevalence of IPV with regards to sexual orientation or ethnicity. These questions were therefore addressed in the present review. The specific aspects explored with regards to the question above are:

- The overall prevalence of partner violence in the UK;
- The prevalence of partner violence in women in the UK;
- The prevalence of partner violence in men in the UK;
- The prevalence of partner violence in the pregnant population in the UK; and
- The prevalence of partner violence stratified by sexual orientation and ethnicity in the UK.

In addition, this review is concerned with screening in different clinical areas, with a particular focus on areas deemed low risk such as General Practice (GP). This review, therefore, distinguished prevalence reports into those concerning the population in general from those concerning clinical populations.

Eligibility for inclusion in the review

Population: Men and women aged 16 and above

Intervention: None

Comparator: None

Outcome: Prevalence of partner violence

Study design: Cross-sectional studies, cohort studies, systematic reviews, Office for National Statistics and other relevant surveillance reports. (On systematic reviews, see final paragraph of “Methods” section, above.)

Date of publication: Women: 01 January 2007 onwards; Men: no date limit

Language: English

Description of the evidence

The searches carried out for question 1 yielded 773 results, of which 49 were judged to be relevant to this question. Out of this, 16 studies were found to be relevant and included in the review. 31 papers were excluded; most did not investigate the prevalence of IPV. The reviewers also excluded papers that concerned perpetrators and not victims as this was not the focus of this review. The list of excluded papers and reasons for exclusions are presented in Appendix 2. The included papers were put in one of two criteria: A) General Population^{50, 59-68} and B) Clinical Population.^{3-6, 69-71}

Also included were six reports related to national level statistics; two each for England and Wales,^{34, 35} Northern Ireland^{36, 37} and Scotland.^{38, 39} For these reports, the reviewers included the most recent reports as being the most relevant to the population today (these were published between 2016 and 2018). For each country the official statistics came, first, from the police and, second, from a national-level crime survey. The police statistics related to the previous year; the crime survey figures were derived from the most recent year in which the survey was performed. For the crime figures there was sometimes a distinction between incidents and crimes, the latter being cases that ended in successful prosecution. Where this distinction is made, the reviewers have taken the higher figure, that is, incidents. Incidents have come to the attention of the police and meet the criteria of DVA; they may not, however, be of sufficient severity to result in a crime being recorded. This is for two reasons: first, incidents of IPV that are not recorded as crimes nonetheless constitute IPV and, second, such incidents may well have health effects, particularly psychological, over the longer term.

Discussion of findings

The findings are presented in two main categories: A) the general population and B) clinical populations; the latter relates to surveys undertaken in clinical settings such as General Practice. Within the general population the data is presented by nations: England and Wales, Scotland, and Northern Ireland. There is also a short subsection presenting data on sub-groups within the general population. Within the clinical population section, the data are presented by types of clinical area, for example, sexual health.

Methodological quality of the studies

A study-level summary of data extracted from each included publication is presented in Appendix 3. The police data on incidents and crimes is derived from a whole population survey supplied to the Government statistical centre (e.g. the Home Office) by the various territorial police forces of the UK plus the British Transport Police. There are some concerns about the quality and consistency of crime recording practice used for police data such that these have been found not to meet the required standard for designation as National Statistics. By contrast, Crime Survey statistics are badged as National Statistics and are thus high quality; they are based on a survey of 50,000 households in England and Wales and proportionate numbers in the other two countries.

Each study (aside from those that were secondary analysis of Government data) was appraised using the Appraisal tool for Cross-Sectional studies (AXIS).⁵⁸ In many of these studies, UK prevalence was only an indirect focus; as such, the results may need to be treated with some caution. The reviewers applied an informal quality appraisal score for the studies (good, fair or poor) which aims to tell the reader whether the study has important limitations with regard to its findings on prevalence. It is important to note this scoring is not a function of the quality of the study but of the quality with regard to the findings on UK prevalence. For example, Costa et al⁶¹ is clearly a good study but is of limited use to this review because of its inclusion of non-UK data.

The largest datasets concerning IPV in the general population come from the 6 official reports, that is, the police data, and the crime surveys for England and Wales, Scotland, and Northern Ireland. It also includes data from 5 new studies^{50, 59-62} and 6 further analysis of crime survey or APMS survey data.⁶³⁻⁶⁸ Three of the 5 new studies are good quality survey, although Costa et al is of

limited use because it includes data taken from beyond the UK; the two surveys of gay and lesbian communities are self-selected and thus at high risk of bias.

A) General population

1) Overall prevalence of IPV (see Table 3)

England and Wales

IPV is not recorded as a specific category in the English and Welsh data (see definitions in the section “Purpose of this Review” above). However, beginning with the incidents and crimes recorded by the police,³⁵ 1,198,094 domestic abuse-related incidents and crimes were recorded by the police in England and Wales in the year ending March 2018. although, based on the Crime Survey of England and Wales (CSEW) statistics, a figure of 2 million incidents and a prevalence of 6.1% is estimated. Of the over-1 million incidents recorded by the police, 598,545 (50%) were not subsequently recorded as a crime. Of those that were, the types were: violence against the person (32.9%), sexual offences (13.6%), miscellaneous (11.0%), public order (7.5%), criminal damage and arson (8.4%). This data has not been converted into a prevalence rate.

Turning to the CSEW,³⁴ here the category closest to IPV is “partner abuse”. In the past year, the prevalence of partner abuse was 4.5% (with 2.7% men and 6.3% women): by type (list not exhaustive), non-sexual partner abuse (4.0%), sexual (0.2%), and stalking (0.9%). In terms of partner abuse over a lifetime, 15.3% reported non-sexual partner abuse, 3.5%, sexual partner abuse, and 6.4% partner stalking. Based on the CSEW statistics, a figure of 2 million incidents and a prevalence of 6.1% is estimated. According to the CSEW, prevalence has reduced since March 2005 (see Appendix 4, Figure 2).

One other national survey of use covered England only. This is the Adult Psychiatric Morbidity Survey (APMS),³⁶ a large survey using a postcode sampling frame. The survey focus was rates of mental illness, but it included questions about IPV. There were 7047 respondents and 23.4% (95% CI: 22.2% to 24.5%) gave a positive response to at least one type of IPV ever (i.e. physical or emotional), a figure similar to the crime survey.³⁴

Table 3. Police and Crime Survey statistics on IPV (or equivalent) in the UK

Region	Data source	Men and women		Men		Women	
		One year	Lifetime	One year	Lifetime	One year	Lifetime
England & Wales	Police	ND	ND	ND	ND	ND	ND
	Crime survey	4.50%	17.4%	2.70%	13.2%	6.30%	28.9%
	APMS	ND	23.5% (England)	ND	ND	ND	ND
Scotland	Police	1.1%*	ND	0.37%	ND	1.60%	ND
	Crime survey	2.90%	14.10%	2.40%	9.20%	3.40%	18.50%
N Ireland	Police	2.5%*	ND	ND	ND	ND	ND
	Crime survey	1.8%	12.10%	0.9%	8.4%	2.5%	15.1%

* = Domestic Abuse or Domestic Violence (all other figures are for IPV or "partner violence"). For definitions see "Purpose of this review, above"

Sources: Crime Survey of England and Wales³⁴; Police incidents or crimes in England and Wales³⁵; APMS⁶³; Scotland Police incidents or crimes³⁸; Scottish crime survey³⁹; Northern Ireland Police incidents or crimes³⁶; Northern Ireland Crime survey³⁷

Scotland

The Police figures are of domestic abuse, not IPV. Beginning with the incidents and crimes recorded by the police,³⁸ 59,541 incidents, including crimes and offences, took place in 2017-18.³⁸ This figure has increased, nearly doubling since 1999 to 2000, but this may be due to changes in policing methods. This gives a figure of 110 incidents per 10,000 populations (1.1%). Where an offence is recorded (not all the incidents resulted in prosecution) the most common were: common assault (37%) and breach of the peace (31%); less common were non-sexual crimes of violence (2%) and sexual offences (3%). The crime survey recorded partner abuse and is thus more specific for our purposes: anytime IPV was 14.1%; past year IPV 2.9%.³⁹

Northern Ireland

The police data is concerned with domestic abuse rather than IPV.⁷² The crime survey includes specific IPV data (in the form of domestic violence by a partner). The police data is supplemented by a second report that looks at trends over 15 years.³⁷

Beginning with the incidents and crimes of domestic abuse recorded by the police, there were 31,008 of these between October 2017 and September 2018. There were 17 domestic abuse incidents and 8 domestic abuse crimes per 1000 population. In terms of crimes, there were 15,404 related to domestic abuse, of which 11,207 concerned violence against the person, and 4,187 (27%) resulted in physical injury.³⁶

The crime survey asked about recent incidents, within the past year, and incidents over a lifetime, that is since age 16. It found a lifetime prevalence of partner abuse to be 12.1%, breaking down into non-physical abuse (9.9%), threats or force (7.8%), threats (3.5%) and force (7.5%); respondents recorded 5.8% of these to be severe. 32.9% of incidents were reported to the police. In the past year, the figure for the prevalence of partner abuse was 1.8%, breaking down into non-physical abuse (1.4%), threats or force (0.8%), threats (0.4%) and force (0.7%). 0.5% of incidents were considered severe by respondents.³⁶

2) Prevalence by sex/gender

England and Wales

The Police statistics in England and Wales currently cover only 28 out of 43 forces. The ratios are weighted towards women, with sexual offences at the top of the ratio list (at 95.7% female) as shown in figure 3 (Appendix 4). Overall the victim was a female in around 75% of the cases. The CSEW³⁴ reports that women were more likely to experience lifetime partner abuse than men (28.9% compared to 13.2%). Its figures for one-year IPV are:

- *Partner abuse*: non-sexual 4.0% (F: 5.64%; M: 2.44%): sexual 0.2% (F: 0.36%, M: 0.08%), Partner stalking: 0.9% (F: 1.4%, M: 0.5%).
- Of those who had experienced abuse in the past year, the types were further categorised as non-physical (emotional, financial) (F: 72.5%, M: 57%), threats (F: 37.8%, M: 28.7%), force (F: 28.0%, M: 45.7%), sexual assault by rape or penetration (F: 3.8%, M: 0.5%), indecent exposure or unwanted sexual touching (F: 4.2%, M: 2.2%) and stalking (F: 23.4%, M: 18.1%)

Based on the sample, the CSEW³⁴ estimated that, in terms of **lifetime abuse**, 4.8 million women and 2.2 million men aged 16 to 59 had experienced domestic abuse since the age of 16. The figures for **one-year abuse**, in the previous year, were 1.3 million women and 695,000 men – specific figures for IPV are not given.

The APMS⁶³ reports that 27.8% (95% CI: 26.2-29.4) of women and 18.7% (95% CI 17.1-20.4) of men had experienced some form of IPV. Further breakdown of the figure is presented in **Error! Reference source not found.** which shows that the level of emotional abuse tends towards being higher in men than women, although not statistically significant. Physical IPV is significantly more prevalent in women than men.

Table 4: Prevalence of Physical and Emotional IPV in England

Lifetime IPV	Physical % (95% CI)	Emotional % (95% CI)
Men	12 (11.2 to 13.8)	6.3 (5.4 to 7.2)
Women	22 (20.7 to 23.6)	5.6 (4.0 to 6.5)

CI: confidence intervals; IPV: intimate partner violence⁶³

Scotland

In the police statistics the rate of victims per 10,000 was 159 Females and 37 males. The numbers where the data were complete were: Female victim, male accused 39,864 (81%), Male victim female accused 7,929 (16%). The remaining 3% were same-sex dyads and are set out below. In the crime survey, the breakdown for partner abuse at any time (14.1% of the population), was female, 18.5%, male, 9.2%; for partner abuse in the past 12 months (2.9% of the population) Female 3.4%, Male 2.4%. Figures 2 and 3 (Appendix 4) show the different rates of psychological and physical abuse for men and women.

Northern Ireland

The document containing police data from 2017 to 2018 does not include anything on the prevalence of IPV by sex. The supplementary document on trends since 2004/5 does, however, include prevalence of domestic abuse (not IPV specifically) by sex. In 2017/18 it says that 68% of domestic abuse crime victims were female and 32% were male. According to the crime survey, women were over twice as likely as men to have been victims of domestic violence by a partner in the last three years, a gender difference that is reflected across each of the three separate offence groups examined: non-physical abuse (F: 4.4%; M: 2.4%); threats (F: 2.0%; M: 0.2%); and force (F: 2.5%; M: 0.9%). In the past year, the gender difference was mentioned for any partner violence (F: 3.1%; M: 1.5%), non-physical abuse (F: 2.7%; M: 1.2%), threats or force (F: 1.3%; M: 0.6%), threats (F: 0.7%; M: 0.0%), force (F: 0.9%; M: 0.3%).

3) Prevalence by sexual orientation

England and Wales

There is no data relating to sexual orientation in the police statistics, the crime survey or the APMS. Two surveys by a campaign group, Stonewall, report on health amongst gay and bisexual men⁵⁹ and amongst lesbian and bisexual women.⁶⁰

Guasp⁵⁹ conducted the largest survey involving 6861 gay and bisexual men in the UK. The survey aimed to explore gay and bisexual men's health needs. DVA was one component of the survey and the findings suggest that 49% of men experienced at least one incident of DVA from a family member or partner since

the age of 16. Forty per cent of gay and bisexual men have experienced IPV compared to 14 % of men in general. 37% gay and bisexual men have experienced at least one incident of domestic abuse in a relationship with a man. 7% reported experiencing IPV perpetrated by a female partner. Psychological or emotional IPV was experienced by 18% of gay and bisexual men where they were repeatedly belittled and made to feel worthless. 17% reported experiencing physical IPV (kicked, bit or hit with a fist). 14% of gay and bisexual men reported to be stopped from seeing friends and relatives by a male partner. 9% of gay and bisexual men were forced to have unwanted sex. 6% continued to be abused after separation and 4% reported receiving death threats. 78% of gay and bisexual men who have experienced domestic abuse have never reported incidents to the police.

A similar survey explored lesbian and bisexual women's health needs. 6178 women participated in the study and findings suggest that 25% of lesbian and bisexual women experience IPV. In two thirds of cases, the perpetrator was another woman. Psychological or emotional IPV was experienced by 20% of women who were repeatedly belittled and "made to feel worthless", and stopped from seeing friends and relatives. 20% of women reported experienced physical IPV (pushed, slapped, kicked and bitten). 7% of women reported being forced to have unwanted sex. 4% of women experienced death threats. Lesbian and bisexual women also report experiencing IPV from men. 15% reported to have been forced to have unwanted sex. 80% lesbian and bisexual women who have experienced IPV have never reported incidents to the police.

Scotland

In the police statistics, the number of same sex incidents of IPV were male/male 2% (n=740) of the total; female/female 1% (n=617). In the crime survey, 6.6% of male respondents reported abuse by a male; 0.6% of females reported abuse by a female.³⁹

Northern Ireland

No information about the prevalence of IPV by sexual orientation in Northern Ireland was available.

4) Prevalence by ethnicity

England and Wales

The CSEW³⁴ reported the ethnicity of victims of partner abuse aged 16 to 59 as: White (87.8%), Mixed/multiple (2%), Asian/Asian British (6.5%), Black/African/

Caribbean/Black British (3.1%) and Other (0.7%). Nearly 17% of the cases (n=88461) discussed at multi-agency risk assessment conferences (MARACs) belong to Black and Minority Ethnic (BME) population. As the 2011 Census reported that 86% of the British population were classified as White, there is no immediately clear pattern of abuse based on ethnicity.

At the 2011 census, the ethnic make-up of the population in Northern Ireland was White 98.2%. The percentage of victims of domestic abuse by ethnicity was recorded at 90%. As with England and Wales, there is no immediately clear pattern of abuse based on ethnicity.

Scotland

Both the police and the crime survey data had no information on partner abuse by ethnicity.

Northern Ireland

The police data from 2017 to 2018 contains no information on ethnicity.³⁶ There is some information on ethnicity of victims in the supplementary data document as summarised in Table 5.

At the 2011 census, the ethnic make-up of the population in Northern Ireland was White 98.2%. The percentage of victims of domestic abuse by ethnicity was recorded at 90%. As with England and Wales, there is no immediately clear pattern of abuse based on ethnicity.

5) Prevalence – additional points

Eleven of the 18 studies included in this review included prevalence data taken from a sample of the general population.⁵⁹⁻⁶⁶ Several articles present secondary analyses of the CSEW.⁶⁴⁻⁶⁸ In brief, the findings were that i) DVA was reported by a higher proportion of disabled over non-disabled victims (44% v 31%, $p < 0.01$)⁶⁵; ii) there was a positive association between some markers of social deprivation and the level of IPV in women but not in men (with the exception of social housing tenure in both men and women)⁶⁴ and iii) both men and women with chronic mental illness were more likely to be victims of IPV.⁶⁸

Another secondary analysis, this time of the APMS in England, showed an association between IPV and some psychiatric disorders in men and women.⁶³ Being a victim of IPV was strongly associated with common mental disorders (CMDs), PTSD, eating disorders, and drug and alcohol misuse. Using the data from the British National Survey of sexual attitudes and lifestyles, Gravningen⁶² focussed on a sub-group who reported recent relationship breakdown. It found that 16% of women and 4% of men cited IPV as a reason for relationship breakdown.

Table 5. Northern Ireland: Domestic abuse crimes recorded by ethnicity and nationality of victim 2016/17 and 2017/18

Ethnicity (<i>Nationality</i>)	Numbers	
	2016/17	2017/18
Asian: of which	82	80
<i>UK and Ireland</i>	19	19
<i>All other nationalities</i>	52	46
<i>Nationality missing</i>	11	15
Black: of which	89	75
<i>UK and Ireland</i>	17	24
<i>All other nationalities</i>	63	35
<i>Nationality missing</i>	9	16
Mixed/Other: of which	73	101
<i>UK and Ireland</i>	19	36
<i>All other nationalities</i>	43	49
<i>Nationality missing</i>	11	16
White: of which	11,652	11,960
<i>UK and Ireland</i>	10,341	10,405
<i>Poland</i>	207	250
<i>Lithuania</i>	100	117
<i>Latvia</i>	32	39
<i>Portugal</i>	24	17
<i>All other nationalities</i>	134	160
<i>Nationality missing</i>	814	972
Ethnicity Missing/Unknown Person: of which	1,195	1,473
<i>UK and Ireland</i>	423	458
<i>All other nationalities</i>	64	69
<i>Nationality missing</i>	708	946
Total (person victims)	13,091	13,689

Adapted from accompanying spreadsheet to PSNI. Trends in domestic abuse incidents and crimes recorded by the police in Northern Ireland.

A survey of 6 European cities, one of which was in the UK (London),⁶¹ showed that 0.5% of women and 4.1% of men in the past year were victims of IPV. 10% of women and 11.9% of men declared bidirectional involvement (that is, being both perpetrator and abuser at different times), and 4.2% of women and 3.8% of men identified themselves as perpetrators, with further details as set out in Trevillion et al's⁴ systematic review. The researchers subdivided these acts on the basis of severity (that is, the risk of injury): of women suffering such IPV, the most common types were psychological aggression (39.7%), sexual coercion (14.2%); physical assault (8.5%), and injury (3.6%). The equivalent figures for men were: psychological aggression (34.3%); sexual coercion (12.4%), physical assault (7.9%) and injury (3.7%). This data was not analysed at city level and so is of interest only; however, the grading of severity was unusual in surveys and might be of use in future studies. Similarly, the category of bi-directional involvement is absent from most studies and might be worth exploring in future research.

B) Clinical Population

The remaining studies were concerned with prevalence in a particular clinical population.^{3-6, 69-71} In all these studies, the data came from a particular area of England, usually the South. All but one of the studies reviewed targeted sexual health and HIV-related areas which are usually considered high risk for IPV as mentioned earlier.

Prevalence in the clinical population (see Table 6)

A summary of the results is shown in Table 6 below. The populations covered in this report are either pregnant or non-high-risk, as defined in the section above ("Current policy context and previous reviews"). As noted in the section above "Focus of the Review", the present review focuses on low-risk areas but also on high-risk areas which serve only pregnant and postnatal women; the review will also take in data that covers pregnant women or other groups not covered in the previous review, particularly gay men in the case of the studies selected here.

The two studies of HIV clinics show high levels of IPV, between 29.4%⁷⁰ and 52%⁴; GUM clinics also showed high levels of IPV.⁷³ One of the studies showed a level of 14.1% during present pregnancy, although this was also the level for past-year IPV and, as such, pregnancy didn't seem to increase risk. Outside of HIV clinics, one study notes a higher rate of IPV in a current relationship between pregnant women attending a termination of pregnancy clinic than those attending

antenatal clinic (5.8% against 0.9%).³ Gynaecology clinics recorded rates of between 24% and 19%.⁷⁴

A survey⁵ of 532 gay men attending a sexual health clinic in London used a particular definition of IPV in terms of negative behaviours; these include: ever felt frightened of the behaviour of a partner; ever needed to ask a partner's permission to work, go shopping, visit relatives or friends (beyond being considerate to and checking with a partner); ever been slapped, hit, kicked or otherwise physically hurt; and ever forced to have sex or made to engage in any sexual activity against one's will. The definition is thus of lifetime IPV. The main result was that of 532 men, 33.9% (95% CI 29.4% to 37.9%) experienced and 16.3% (95% CI: 13.0% to 19.8%) reported carrying out negative behaviour. Only one study⁶ explored the prevalence of IPV in primary health care clinics, namely 16 general practices in SW England. 1368 male patients completed the questionnaire, which used the IPV definition as "negative behaviours" (as in the Bacchus study reported above). For lifetime IPV, 22.7% (95% CI 20.2% - 24.9%) of men reported ever experiencing negative behaviour from a partner (feeling frightened, physically hurt, forced sex, ask permission to go out, and so on). 107 (41.2%, 95% CI 34.3% - 47.8%) said the behaviour had occurred only once, and 66 (25.4%, 95% CI 19.8% - 31.6%) that it had occurred more than once and for over a year. 212 of 1294 male respondents (16.4%, 95% CI 14.3% - 18.5%) reported perpetration of negative behaviours against a partner at least once. For past-year IPV 7.6% (95% CI 6.2% - 9.1%) reported experiencing any negative behaviours in the past 12 months. Fifty-eight of 1283 male respondents (4.5%, 95% CI 3.5% to 5.8%) reported perpetrating any negative behaviours in the past 12 months for over a year. 212 of 1294 male respondents (16.4%, 95% CI 14.3% - 18.5%) reported perpetration of negative behaviours against a partner at least once. For past-year IPV 7.6% (95% CI 6.2% - 9.1%) reported experiencing any negative behaviours in the past 12 months. 58 of 1283 male respondents (4.5%, 95% CI 3.5% to 5.8%) reported perpetrating any negative behaviours in the past 12 months.

C) Conclusion

To sum up, the data from police statistics and crime surveys (plus the APMS) in the UK shows that rates of IPV for men and women are high. High levels of IPV do not of themselves show it to be an important health problem. The link cannot be assumed because, for example, one incident of verbal abuse from a partner might count within the criteria of lifetime IPV but is unlikely to have health

Table 6. Summary of results showing prevalence of IPV in the (non-high-risk or high-risk pregnant) clinical population

	Population General or Clinical	Definition IPV	IPV Lifetime	IPV One-year
Bacchus et al., 2017⁵	532 Gay men attending sexual health clinic	Negative behaviours experienced as an adult from a current or former intimate partner	33.9% (95% CI: 29.4-37.9) experienced and 16.3% (95% CI: 13.0-19.8) carried out negative behaviour [EVER].	Data unclear
Dhairyawan et al., 2013⁴	191 Women attending HIV clinic	HARK plus added questions for lifetime prevalence	52% (95% CI: 44.7-59.0). The most common form of IPV experienced by women was humiliation/emotional abuse (45%) followed by feeling afraid of a partner (33%), physical abuse (33%) and then rape/sexual abuse (20%)	14.1% (95% CI: 9.1-19.1) and 14.1% (95% CI: 9.1-19.1) during pregnancy.
Hester et al., 2015⁶	1368 Male patients of General Practice, aged 18 or older, attending alone, who could read and write English.	Negative behaviours experienced as an adult from a current or former intimate partner	22.7% (95% CI 20.2% to 24.9%) of men reported ever experiencing negative behaviour (feeling frightened, physically hurt, forced sex, ask permission) from a partner. 107 (41.2%, 95% CI 34.3% to 47.8%) said the behaviour had occurred only once, and 66 (25.4%, 95% CI 19.8% to 31.6%) that it had occurred more than once and for over a year.	122 (7.6%, 95% CI 6.2% to 9.1%) reported experiencing any negative behaviours in the past 12 months.
Johnson et al., 2007⁶⁹	825 Women attending gynaecology clinic	Modified version of AAS	24% (198/825): Less common in women over 50	ND
Motta et al., 2015⁷⁴	190 Women seeking termination of pregnancy	AAS	16%	Physical 11% - sexual 4%. Prevalence of DV in current pregnancy 4%

Sanmani et al., 2013⁷³	476 Attenders at GUM clinic	AAS	98/472 21%: 12%M 29%F. Emotional 19.3%; physical 16.2; financial 6.1; sexual 5.7.	50/476 (106%); 3.9% M: 16.9% F.
Warren-Gash et al., 2016⁷⁰	10158 patients screened for domestic violence in community gynaecology, genitourinary medicine (GUM) and HIV medicine clinics between 1 October 2013 and 30 June 2014.	Idiomatic questionnaire: "Have you ever been emotionally or physically hurt by your partner, ex-partner or family member?"	ND	7.1% across all clinics: GUM 5.7%; Gynae 19%; HIV 29.4%. F9.5%: M 3.8%.
Wokoma et al., 2014³	507 Pregnant women in first trimester attending TOP clinic or ANC clinic	AAS	ND	In the current relationship: TOP population 5.8%, ANC 0.9%

consequences. The six-city survey⁶¹ shows it is possible to sub-categorise IPV based on severity and likelihood of health consequences but we did not find this analysis undertaken in other studies. In mitigation it should be noted that the instruments used in the studies, such as CTS-2 and AAS are unlikely to record trivial incidents; the men and women who score positive for IPV clearly view the incidents as serious. Furthermore, the police figures distinguish between incidents of domestic abuse and crimes, which are a subset of the incidents. Crimes tend to be around half the level of incidents but are clearly serious and many are likely to have health implications. Taking the England and Wales figures, the most common of these crimes were violence against the person (39.2%) and sexual offences (13.6%), both of which were heavily weighted towards females. It seems likely that all such incidents are likely to have physical and other health consequences for the victim. In addition, the CSEW has data on physical injuries and other effects felt as a result of partner abuse experienced in the past year, ending March 2018. 25.5% reported physical injury and 53.3% other effects, such as mental or emotional problems, including 8.4% who “tried to kill self”. 33.1% received medical attention.

Summary of Findings Relevant to Criterion 1: Criterion not met§

From 16 studies and 6 surveillance reports, this review found that there is a high prevalence of lifetime IPV of between 12% and 24%. Overall, women were more likely to suffer sexual and physical IPV, men, perhaps, emotional IPV, although data from police and crime survey statistics is limited. Although rates are always higher in women, men also experience IPV, and this is not limited to particularly men who have sex with men.

The association between IPV with poor health is well-established. As such, IPV can be deemed prevalent and important. However, further work would need to be done in order to declare criterion 1 to be met to a level satisfactory for considering population level screening. There are several concerns.

§ **Met** -for example, this should be applied in circumstances in which there is a sufficient volume of evidence of sufficient quality to judge an outcome or effect which is unlikely to be changed by further research or systematic review.

Not Met - for example, this should be applied in circumstances where there is insufficient evidence to clearly judge an outcome or effect or where there is sufficient evidence of poor performance.

Uncertain -for example, this should be applied in circumstances in which the constraints of an evidence summary prevent a reliable answer to the question. An example of this may be when the need for a systematic review and meta-analysis is identified by the rapid review.

The quality of the studies was mixed. The crime surveys give good quality evidence; the police data less so, particularly as definitions are not used consistently. The problem of definitions also applies to data from other studies, where different tools were used, as well as different definitions of IPV. Some of the studies are small and the sampling is inadequate. The evidence was, however, applicable to a screening population in the UK as it included population data across all four nations.

The prevalence of IPV was variable and the difference in rates across the three UK regions in the crime surveys was noteworthy, with Northern Ireland having the lowest rates, England and Wales, the highest. It was not possible to determine whether these differences were genuine or the results of differences in definition and collection of data. There seem to be no strong trends in relation to ethnicity but again there is insufficient data.

Data on IPV prevalence in pregnant women is limited and some is highly specific (e.g. to GUM or HIV clinics); there was insufficient data to conclude that rates are higher in pregnancy than elsewhere but one study showed a rate in the current relationship of between 0.9% and 5.8%. Some of the rates from areas thought to be high risk, such as GUM clinics, do not seem particularly high when set against the general population. HIV clinics had strikingly high levels, however. There was insufficient data from other clinical areas to draw any conclusions other than a need for more research in, for example, general practice areas. There seem to be no strong trends in relation to ethnicity but again there is insufficient data.

Criterion 4 – Test accuracy

There should be a simple, safe, precise and validated screening test.

Question 2 – How accurate are partner violence screening tools in UK women and men?

The previous UK NSC review conducted in 2013² concluded that a wide variety of tools were available to screen for IPV in clinical settings. Some of these were valid, however, none of the tools were tested in the UK health care setting. The review concluded that no single tool stood out as the optimum for use in the UK. The review considered evidence on screening tools available for women victims of IPV published since the previous review, and to look at evidence on other population groups such as men, pregnant women and individuals from BME background. The specific objectives explored, in this review, with regards to question above were:

- To estimate the sensitivity, specificity, positive and negative predictive values of currently available partner violence screening tools in women in the UK.
- To estimate the sensitivity, specificity, positive and negative predictive values of currently available partner violence screening tools in men in the UK.
- To estimate the sensitivity, specificity, positive and negative predictive values of currently available partner violence screening tools in pregnant women in the UK.
- To estimate the sensitivity, specificity, positive and negative predictive values of currently available partner violence screening tools stratified by sub-groups, such as sexual orientation and ethnicity, and by setting, such as GP practices and antenatal clinics in the UK

Eligibility for inclusion in the review

Population: Women aged 16 and above with no obvious signs or symptoms of abuse; Men aged 16 and above with no obvious signs or symptoms of abuse.

Index test: Screening tools/questionnaires designed to detect current or past IPV, including self-administered, computer-enabled or patient self-report instruments, as well as clinician-administered screening methods, such as HITS tool.

Target condition: Experience of partner violence

Reference standard: Partner violence-associated injuries, verified or self-reported abuse or validated (high sensitivity and specificity) screening instrument for abuse

Comparator: None

Outcome: Sensitivity, specificity, positive predictive value, negative predictive value.

Study design: cross-sectional studies, cohort studies, systematic reviews, meta-analyses. (On systematic reviews, see final paragraph of “Methods” section, above.)

Date of publication: Studies published between 2007-2018 (for women); No date limit for men; Studies conducted in the UK, USA, New Zealand, Australia, Canada, Ireland

Language: English

Description of the evidence

Database searches yielded 5912 results, of which 40 met the criteria for full text review for criterion 4 (question 2); 4 were included for this question.^{7, 75-77} The same search was used for criteria 11 and 13 (question 4) and 4 were included for that question. The remaining 32 studies were excluded after full text review. The reasons are set out in appendix 3 but it is worth noting that several studies were excluded as they were conducted in a high-risk area (those settings that NICE recommends proactively asking patients about IPV) and those that report higher IPV prevalence rates (with the exception of antenatal settings) as it was decided *a priori* that low risk areas (primary care) and antenatal settings would be prioritised, whereas high-risk areas would only be included if there was no evidence on low risk areas.

Appendix 2 contains a full PRISMA flow diagram (Figure 1) along with a table of the included publications and details of which questions these publications were identified as being relevant to (Table 10). A list of excluded papers and their reasons for exclusion are also provided. Of the included studies, only one study⁷ was conducted in the UK. One study⁷⁵ was conducted in Canada and the remainder of the studies were conducted in the USA.

Discussion of findings

We included 4 studies, of which 2 included women only^{77,7}, 1 included male and female parents⁷⁶ and 1 focused on gay men.⁷⁵ One study reported on the percentage of women who were pregnant.⁷⁷ One study focused on women veterans.⁷⁷ On ethnicity, one study⁷⁵ did not give details but the remainder gave the proportion of non-White participants as between 20% and 60%. Participants

were recruited from primary care,^{7, 75} reproductive health centres⁷⁶ and female veteran clinics.⁷⁷

A study-level summary of data extracted from each included publication is presented in Appendix 3 where publications are stratified by questions. Where available, sensitivity, specificity, negative and positive predictive value related information is indicated in the tables. In the following, the quality of the evidence is summarised, then the findings of the review are presented with regards to each sub question/ objective. No studies were found that exclusively examined screening tools in men other than that specifically developed for gay men.

Methodological quality of the studies

The summary and appraisal of individual studies is set out in appendix 3. Each study was assessed in accordance with the CASP checklist^{56, 57}. Whilst the studies adopted appropriate aims and method, an important limitation was that the populations were fairly specific (e.g. US army veterans, Afro-American women) raising some concerns about the applicability to a UK population. All the studies were small, in particular the gay-man study was small and was included primarily because it was the only one found on the topic of screening for gay men – the only reasonable conclusion to be drawn is as a feasibility study for further research.

The sensitivity, specificity, positive and negative predictive values of currently available partner violence screening tools in women

Seven tools were used either as an index or reference standard. These were:

- Composite Abuse Scale (CAS): 30 items assessing physical, emotional and combined abuse and harassment
- Conflicts Tactic Scale-2 (CTS-2): the original CTS was 80 items assessing intra-family conflict and violence; the CTS-2 has 39 items, but each is asked about the participant and the partner, making 78 in total; CTS-2 has ten items
- Gay Abuse Screening Protocol (GASP): an adaptation of WAST specifically aimed for use with gay men
- Humiliation, Afraid, Rape, Kick (HARK): 4 items assessing emotional and physical IPV in the past year
- Hurt/Insult/Threaten/Scream (HITS): 4 items assessing frequency of current IPV
- Parent Screening Questionnaire (PSQ): 3 items assessing physical IPV in the last year plus current safety

- Woman Abuse Screening Tool (WAST): 8 items assessing physical and emotional IPV; 3 items assessing physical IPV in the past year and historically

A recent review⁴⁰ lists CTS-2 and CAS as two of three gold standard validated reference tools; and these were used as the reference standard in 3 of the 4 studies.^{7, 76} In general, the aim of the studies used here was to validate a short tool, easy to administer in the clinical area, against the longer gold-standard tools. The tools tested were the GASP,⁷⁵ PSQ⁷⁶, HITS⁷⁷, HARK⁷. The results are set out in Table 8. Sohal⁷ is of interest in that it was the sole UK study included in this review. It involved the administration of questionnaires to women in GP waiting rooms. It found the four-item HARK questionnaire to have good sensitivity and specificity (against CAS as reference standard); the authors concluded that their study provides evidence suggesting HARK may be an effective tool. Dubowitz⁷⁶ looked at the 3-item PSQ used with parents in a paediatric clinic. Sensitivity was low but specificity was high (against CTS-2 as reference standard). The authors note that 1 of the 3 items of the PSQ, the one relating to physical assault, was almost as effective as the 3 items together. They conclude that this item could be used as a reasonably effective one-question quick-scan tool. Iverson⁷⁷ (using CAS as reference standard) established that a cut-off score of 6 on the HITS tool gave best overall scores, as shown in the table. The authors conclude that the results are promising for the use of HITS.

Sensitivity, specificity, positive and negative predictive values of currently available partner violence screening tools stratified by sub-groups, such as sexual orientation and ethnicity, and by setting, such as GP practices, Antenatal clinic

There was only one study with regards to this question.⁷⁵ The study conducted in Canada, looked at screening for abuse in gay male relationships. The authors noted that no other research tested an abuse-screening tool with gay males. They developed a tool GASP – Gay Abuse Screening Protocol – modelled on a simplified form of WAST. In line with the development of WAST, the two initial questions were taken as the screening questions which would be followed up by the clinician if either were positive. The three last questions which specifically ask whether the person has suffered physical, psychological or sexual abuse were taken as the standard against which the two initial questions were assessed. The authors were primarily concerned with physician and patient comfort with the tool; the comfort scores for both groups was high, although lower in abused rather

than non-abused patients. They conclude that the tool merits further investigation.

Table 7. Accuracy of IPV Screening Instruments

Author, Year, Setting	N	Screening tool	Reference Standard	Prevalence	Sensitivity % (95% CI – where given)	Specificity % (95% CI – where given)	PPV % (95% CI – where given)	NPV % (95% CI – where given)	Positive Likelihood Ratio (95% CI – where given)	Negative Likelihood Ratio (95% CI – where given)
Chan et al., 2008⁷⁵, USA, Primary care	40	GASP	WAST	ND	40%	95.5%	80%	77.8%	ND	ND
Dubowitz, et al, 2008⁷⁶, USA, Paediatric primary care	200	PSQ	CTS-2	12%	Any abuse: Physical assault (ever): 19%; Injury (ever): 29% ; Psychological aggression (upper fifth split): 27%	Any abuse: Physical assault (ever): 92.5%; Injury (ever): 91.1%; Psychological aggression (upper fifth split): 92%	Any abuse: Physical assault (ever): 62.5%; Injury (ever): 37.5%; Psychological aggression (upper fifth split): 45.5%	Any abuse: Physical assault (ever): 63.1%; Injury (ever): 87.3%; Psychological aggression (upper fifth split): 83.4%	Any abuse: Physical assault (ever): 2.5 ; Injury (ever): 3.3; Psychological aggression (upper fifth split): 3.3	Any abuse: Physical assault (ever): 0.88; Injury (ever): 0.78; Psychological aggression (upper fifth split): 0.79
Iverson, et al., 2013⁷⁷, USA, Veterans' health clinic	160	HITS	CTS-2	29%	75% (64%-88%)	80% (71%-87%)	61% (47% to 73%)	90% (82% to 95%)	3.9 (2.61 to 5.76)	0.27 (0.16 to 0.47)
Sohal et al., 2007⁷ UK, GP Practices	232	HARK	CAS	23%	81% (69%-90%)	95% (91%-98%)	83% (70% - 91%)	94 % (90% - 97%)	Multilevel LR 16 (8-31)	ND

Summary of Findings Relevant to Criterion 4: Criterion not met**

The four studies used were small and in one case, little more than a pilot or feasibility study (included here as it introduces a tool for use in screening gay men, something not found elsewhere). The other three studies tested relatively short tools against the gold-standard tools that are generally felt to be impractical for clinical use screening.

These 3 studies were across 3 different index tools; as such, there is limited evidence for any one screening tool. There was 1 UK-based study which found HARK to have performed well against the CAS standard, with a sensitivity, specificity, PPV, and NPV of 81%, 95%, 83%, and, 94% respectively.⁷ The equivalent figures for the HITS tool in a US-based study were 78%, 80%, 61% and 91%. In another US study, the figures for PSQ were 29%, 92%, 41% and 88%. As such, the reported test values seem reasonable apart from the sensitivity of the PSQ.

Despite there being no date limits for men, we found little apart from the gay-men study mentioned.

The low volume of studies, small study sizes plus applicability to the UK population (aside from the HARK study) are the main concerns. Furthermore, with only one study on each index tool, the consistency of evidence cannot be assessed. Finally, the studies were of fairly low quality, with risk of bias in outcomes due to small samples and narrow selection criteria plus some concerns about missing data.

Therefore, based on the quantity, quality, consistency, and applicability of the evidence on any one tool, this criterion remains unmet.

** **Met** -for example, this should be applied in circumstances in which there is a sufficient volume of evidence of sufficient quality to judge an outcome or effect which is unlikely to be changed by further research or systematic review.

Not Met - for example, this should be applied in circumstances where there is insufficient evidence to clearly judge an outcome or effect or where there is sufficient evidence of poor performance.

Uncertain -for example, this should be applied in circumstances in which the constraints of an evidence summary prevent a reliable answer to the question. An example of this may be when the need for a systematic review and meta-analysis is identified by the rapid review.

Criterion 9 – Effectiveness of intervention

9. There should be an effective intervention for patients identified through screening, with evidence that intervention in a pre-symptomatic phase leads to better outcomes for the screened individual compared with usual care. Evidence relating to the wider benefits of screening, for example, those relating to family members, should be taken into account where available. However, where there is no prospect of benefit for the individual screened then the screening programme should not be further considered.

Question 3 – What is the reported effectiveness of interventions after partner violence is disclosed by men and women?

This question was addressed in the earlier review conducted in 2013. The review concluded that there is a range of interventions for IPV, though there is a lack of evidence demonstrating benefit from these interventions. The current review therefore focuses on specifically developed question and objectives given below:

- To estimate the effectiveness of interventions after partner violence is disclosed by women in a health setting in women in the UK;
- To estimate the effectiveness of interventions after partner violence is disclosed by men in a health setting in the UK;
- To estimate the effectiveness of interventions after partner violence is disclosed by pregnant women in antenatal care in the UK; and
- To estimate the effectiveness of interventions after partner violence is disclosed, stratified by sub-groups, such as sexual orientation and ethnicity, and by setting of disclosure such as GP practices or antenatal care, in the UK.

Eligibility for inclusion in the review

Population: Women aged 16 and above with no obvious signs or symptoms of abuse; Men aged 16 and above with no obvious signs or symptoms of abuse.

Intervention: intervention used once partner violence is disclosed in a healthcare/ antenatal setting, including counselling, case management, home visitation, mentor or peer support, safety planning and referral to community services.

Comparator: None or different intervention

Outcome: Primary outcomes:

- a) Reduced episodes of violence (physical, sexual, and/or psychological)

- b) Prevention of violence as defined by the authors of trials (e.g. during pregnancy, one year after screening or first visit etc.)
- c) Adverse events from intervention, such as increased abuse or other forms of retaliation, emotional distress, labelling, stigma

Secondary outcomes (including but not restricted to):

- a) Identification of partner violence
- b) Information giving and referrals to support agencies (including take-up rates when available)
- c) Physical and psychological morbidity, e.g. physical trauma such as fractures and dislocations, chronic medical conditions, acute mental morbidity such as stress and nightmares, chronic mental health conditions such as PTSD, anxiety, depression and sexual trauma, unintended pregnancy, sexually transmitted diseases
- d) Mortality
- e) Maternal outcomes such as miscarriage, antepartum haemorrhage, premature labour, placental abruption
- f) Neonatal outcomes such as birthweight, APGAR score first minute, APGAR score fifth minute, stillbirth, perinatal death
- g) Child safety and well-being
- h) Quality of life, social isolation and self-esteem

Study design: Randomised controlled trials; Quasi-experimental studies; Cohort studies, systematic reviews. (On systematic reviews, see final paragraph of “Methods” section, above.)

Date of publication: 01 January 2007 –June 2018 for women; no date limit for men

Language: English

Description of the evidence

Database searches yielded 6825 results, of which 66 were judged to be relevant to this question (criteria 9) and 22 studies met the criteria for full text review, after which 10 publications were included. The remaining 12 studies were excluded. Reasons for exclusion included not relevant study setting (n=3), topic not relevant (n=3), or an ineligible study design (n=3). In addition, 3 studies were excluded as they were conducted in a high-risk area (those settings that NICE recommends proactively asking patients about IPV and those that report higher IPV prevalence rates (with the exception of antenatal settings) as it was decided

a priori that low risk areas (primary care) and antenatal settings would be prioritised, whereas as high risk areas would only be included if there was no evidence on low risk areas.

Appendix 2 contains a full PRISMA flow diagram (Figure 1), along with a table of the included publications and details of which questions these publications were identified as being relevant (Table 12).

Discussion of findings

A total of 10 studies (7203 participants) exploring the effectiveness of interventions after IPV was diagnosed in the health care setting were included in the study.^{8, 78-86} Two studies were conducted in Australia^{8, 86} and the remainder in the US.⁷⁸⁻⁸⁶ Therefore, there were no studies addressing this question in the context of UK. The study design included RCTs,^{8, 79-86} with one study using quasi-experimental design.⁷⁸ Four studies used a cluster RCT design with two studies clustered by clinic,^{85, 86} one clustered by home visiting programme,⁸¹ and one clustered around individual GPs.⁸ All studies involved women only and five studies focussed on pregnant women^{79-81, 83, 86} who screened positive for IPV or were considered at risk of IPV. Participants were recruited from primary care clinics^{8, 78, 84, 86} prenatal/ antenatal clinics^{79, 80, 83} and family planning clinics.^{82, 85} Studies explored various interventions including, home visits,^{81, 86} counselling offered during clinic visit,^{79, 80, 83} in clinic advocacy,⁷⁸ or in person counselling in clinic followed by telephone calls⁸⁴, motivational interviewing at different intervals,⁸² and a computer based motivational intervention⁸³. One RCT evaluated an intervention focused on clinician training and education that encouraged discussion of IPV during all patient encounters in family planning clinics⁸⁵. Table 9 and 10 provides a summary of the interventions. A study-level summary of data extracted from each included publication is also presented in Appendix 3.

There were no studies addressing the effectiveness of interventions after partner violence is disclosed by men in a health setting in the UK or elsewhere or the effectiveness of interventions after partner violence is disclosed by sexual orientation, ethnicity, or setting of disclosure. There were also no reports of harm from any intervention although the studies did not seem designed to detect them. Finally, we note that the IRIS model recommended in the previous review² was not re-used in any study we found.

In the following, the methodological quality of the studies is summarised, followed by the findings of the review presented with regards to each of the sub questions/objectives for which evidence was found.

Methodological quality of studies

The summary and appraisal of individual studies is set out in appendix 3. Each study was assessed in accordance with the CASP checklists.⁵⁷ Table 9 and 10 provide information about methodological quality of the studies. While all included studies explored interventions to be used with IPV victims once IPV was identified in the health care setting, however, none of the study was conducted in the UK and therefore applicability of these findings to UK context is uncertain. While all RCTs were of good or fair quality, common methodological issues include high refusal rate (of eligible participants to participate in the study), small sample size, limited generalisability, risk of selection bias and response bias. In addition, nearly all studies suffered from high attrition rate (20% or higher), though missing data was dealt with use of imputations.

The effectiveness of interventions after partner violence is disclosed by women in a health setting

Five studies investigated the impact of clinic based advocacy/counselling sessions to increase women's help seeking,^{8, 78} reduce violence^{8, 78} improve women's well-being,^{8, 78} women's engagement in safety-promoting behaviour.^{8, 84} One cluster RCT focused on provider education and training related to IPV and sexual coercion by encouraging discussion of IPV at all family planning clinic encounters.⁸⁵ Another RCT assessing motivational interviewing screened for past-year IPV using the AAS and WEB administered through an in-person computer-assisted tool.⁸² Table 9 provides a detailed summary of the interventions aiming at non-pregnant women.

Examples of interventions included in-person motivational interviewing⁸² or counselling sessions^{8, 78, 84} followed by telephone calls over a period of time.^{82, 84} The counselling sessions were provided by trained advocates⁷⁸ or specially trained clinical staff.^{8, 85} In 3 studies the comparison group was provided with usual care in the form of provision of information about community resources and helpline numbers.^{78, 82, 84} Two studies, however, mention usual care but did not describe what usual care entails.^{8, 85} Studies related specifically to pregnant women are discussed in the section below. The remaining 5 studies are summarised in table 9 below.

IPV Exposure

Four studies provided information about the impact of the intervention on IPV exposure.^{8, 78, 84, 85} None found statistically significant differences between treatment and control. Hegarty and colleagues⁸ caution against using IPV exposure as a meaningful outcome in the short term and thus do not include it in their main objectives. Nonetheless, they did ask both their intervention and control group participants to complete the CAS, finding no significant difference from baseline to 12 months in percentage of women with a CAS score at 7 or above (indicating exposure to IPV across up to four aspects: physical, emotional, harassment and combined; the cut-off of 7 seems to have been set first by Macmillan et al⁸⁷). Therefore, the evidence on the impact of the interventions on reduction in IPV is weak.

Mental Health

Four studies reported the impact of the intervention on mental health.^{8, 78, 82, 84} Only one, Coker et al, using an advocacy intervention, found a statistically significant difference in suicidal ideation and depression in the treatment group at 6 months. Gillum et al found no statistically significant differences in depression and PTSD. The other two found no statistically significant difference with regard to depression. Therefore, the evidence on the impact of the treatments on improving mental health is weak.

Quality of life

Quality of life was measured in 1 study⁸ and no statistically significant difference between treatment and control was found. Therefore, the evidence on the impact of the treatments on improving quality of life is weak.

IPV Knowledge and Safety Promoting Behaviours

Five studies looked at outcomes with regard to knowledge of IPV or safety-promoting behaviour or self-efficacy – using various measures. Some statistically significant differences were found in 3 studies.^{78, 84, 85} Miller et al report an improvement in knowledge of IPV resources (although not in their use); Gillum et al report an improvement in safety-promoting behaviour (e.g. having a spare set of car keys hidden); and Coker et al report women more likely to use services provided by the advocate. Overall, the evidence on the impact of the treatments on knowledge and some behaviours is mixed and conflicting.

Table 8. Detailed Summary of the Interventions for non-pregnant women

Authors, Year, Country	Population, setting	Intervention	Outcome	Comments
Coker et al., 2012⁷⁸ USA	751 Women Attending Primary Care (447 intervention, 304 control)	Intervention: In clinic advocacy provided by a clinic-based IPD advocate; Control: Usual care; IPV+ women were given the business card of their health care provider with the coalition hotline number.	IPV exposure – measured by WEB plus follow-up and 17-item Danger Assessment Score: no statistically significant difference over 6 months Mental Health: No differences regarding self-perceived mental health over time but intervention group scored better for depressive symptoms and suicidal ideation over time [6 months] (p= 0.01). Quality of life – not measured Safety seeking behaviour: measured using help-seeking questions in USA National Violence Against Women Survey. Intervention women were more likely to use services provided by the advocate (p=0.03)	Less than 50% response rate; Not a fully cluster-randomised controlled trial (3 out of 8 clinics not randomised); selection bias; high refusal rate (54%); high attrition as only a small number completed follow up
Gillum et al., 2009⁸⁴	41 women screened positive for IPV in past	Intervention: One on-site and 6 telephone counselling sessions over a 3-month period by a	IPV exposure – measured using Partner Violence Screen, Partner Abuse Scale and	Small sample; selection bias, women may not have

USA	year (21 intervention, 20 control)	community health worker – average duration 20 minutes Control: Received health information brochures, a list of community resources, and a monthly telephone call to confirm contact information.	Danger Assessment Score ² . No statistically significant difference between groups. Mental health – depression and PTSD measured using Center for Epidemiologic Studies-Depression Scale. No statistically significant difference between groups. Quality of life – not measured Safety promoting behaviour: measured using 15-item checklist. Intervention group significantly more likely to engage in safety-promoting behaviours $p < 0.01$ – on average, those who received the intervention engaged in 3.47 more safety-promoting behaviours.	reported abuse at true scale; response bias
Hegarty et al., 2013⁸ Australia	Multiple family practice clinics (roughly UK GPs); Women 16-50 who screened positive for fear of their partner in the past 12 months (137 intervention, 135 control)	Intervention: Physician training to respond to women who screen positive for IPV and deliver a brief in-person IPV counselling intervention to screen positive women – average duration 30 minutes – frequency varied by patient need Control: Usual Care	IPV exposure – measured using CAS – no significant differences Mental health – measured using SF12 - no significant differences in anxiety; no significant differences in depression at 6 months – but at 12 months, fewer women in treatment arm had depressive symptoms [Adjusted Odds	Fair to good quality RCT; lack of masking of providers and patients - low rate of attrition (6% for doctors and 28% for patients); Slightly more women in comparison group were living with partner and had children younger than 18 years.

			Ratio 0.4 (95%CI 0.2 to 0.8); p= 0.006.	
			Quality of life – measured using WHO Quality of life – BREF No statistically significant differences	
			Help seeking behaviour: safety planning and behaviour or mental-health SF-12 at 12 months. No statistically significant differences.	
			No adverse events recorded	
Miller et al., 2016⁸⁵	25 family planning clinics (17 clusters) 4009 women 16-29 who agreed to a follow-up interview	Clinician and staff training (medical assistants, health educators) to deliver in-person universal screening/ education, and brief counselling (emphasising harm reduction strategies) for IPV/reproductive coercion; additional support, including referrals to victims' services, provided to those who screened positive	Reproductive coercion – measured using ten-item tool: no significant differences at T2 (12-20 weeks) and T3 (12 months) (times pooled) Adjusted Risk Ratio [ARR] (95% CI) 1.5 (0.95 to 2.35)	Limited generalisability; lost to follow-up rate high (21% at 12 months); those lost to follow-up had a higher prevalence of IPV at baseline; Analysis controlled for missing data by using imputations; Usual care was not well described
USA		Control: usual care	IPV – measured using 3-item tool – unclear which: no significant difference ARR 1.07 (0.84 to 1.38)	
			Mental Health – Not measured	
			Quality of life – Not measured	
			Help seeking – Statistically significant difference in knowledge of IPV-related resources in intervention group 4.25 (3.29 to 5.5) but no	

			<p>difference in harm reduction behaviours.</p> <p>Other – no significant differences in pregnancy (unintended or intended), or use of harm reduction behaviours.</p>	
<p>Saftlas et al., 2014⁸²</p> <p>USA</p>	<p>2 family planning clinics; women screened positive for IPV by a current partner within the past year and had to be aged 18 years or older, English-speaking, and neither currently pregnant nor incarcerated.</p> <p>155 intervention (98 completed)/ 155 control (106 completed)</p>	<p>In-person motivational interviewing by trained coordinator or onsite certified domestic abuse advocate focussing on individual goal setting to improve health and increase safety – total around 90 minutes. (Content: physical health, emotional health, social support, quality of work or home life, or their relationship)</p> <p>Control: Provision of written materials and referrals to community-based resources</p>	<p>IPV not measured</p> <p>Only measurements were:</p> <p>Self-efficacy – measured by modified version of Domestic Violence Coping and Self-Efficacy Scale – no statistically significant difference</p> <p>Depressive symptoms – measured using Centre for Epidemiologic Studies Short Depression Scale – no statistically significant difference</p> <p>Stage-of-readiness-to-change – measured using tool adapted from research in the area – no statistically significant difference</p>	<p>Recruitment was less than anticipated and made study lack statistical power; lack of masking; High overall attrition but no significant differential attrition (33% including 2 with missing data)</p>

The effectiveness of interventions after partner violence is disclosed by pregnant women in antenatal care

Four studies reported in five papers enrolled pregnant or postpartum women (n=886) who screened positive for IPV (with, in some cases, additional criteria, such as low income or particular ethnicity) .^{79-81, 83, 86} Three of these screened for IPV using a validated tool^{81, 83, 86} and the fourth asked women whether they had experienced physical or sexual abuse from a current or former partner in the past year or were afraid of their current partner.^{79, 80} The mean age of participants, where reported, ranged from 24 to 32.^{79-81, 83, 86} Three RCTs reported race/ethnicity of the participants and all had a majority of non-white participants.^{79-81, 83} Table 10 provides a summary of the intervention and results for studies involving pregnant women.

Post-intervention, different studies measured various outcomes which included: IPV exposure, pregnancy and birth outcomes, quality of life, mental health, risk behaviours and satisfaction with the intervention. We shall take each in turn.

IPV exposure

All four studies took some measure of IPV, although in one, this does not seem to involve a validated tool but rather takes the form of questions at interviews.^{79, 80} Three showed a statistically significant difference in the treatment group^{79-81, 83}; the fourth showed a consistent favouring of the intervention group but recruitment shortfall led to lack of statistical power.⁸⁶ It is perhaps of note that statistical significance was reached in one study in relation to pregnant women; it seems to offer weak evidential support for the NICE PH50, Recommendation 6 referred to earlier, which recommends routine screening in antenatal and postnatal clinics (amongst others).

Pregnancy and birth outcome

This was examined in one study which found a statistically significant difference favouring the intervention group in terms of neonates being born very preterm, and in terms of mean gestational age.^{79, 80}

Mental health outcome

The Edinburgh Postnatal Depression Scale was used in two studies,^{81, 86} neither of which found a statistically significant difference.

Table 9. Summary of the Interventions for pregnant women

Authors, Year, Country	Population, setting	Intervention	Outcomes	Comments
<p>EI-Mohandes et al, 2008⁷⁹</p> <p>Kiely et al, 2010⁸⁰</p> <p>USA</p>	<p>African American women ≥18 years, ≤28 weeks' gestation and reporting any of 4 risk factors; Subgroup experiencing IPV screened positive for any IPV in the year prior to pregnancy</p> <p>150 intervention</p> <p>156 Control</p>	<p>Intervention: Individual in-person CBT from trained social worker or psychologist aimed at reducing behavioural risks (depression, IPV, smoking, and tobacco exposure); sessions targeted toward specific risks reported by women at that session.</p> <p>Prenatal: 3.9 (mean); range 4-8 sessions; Duration: 36±15 min.</p> <p>Postpartum:0.8 (mean); range 0-2 sessions; Duration: 38±13 min; Frequency determined by Mothers' attendance at routinely Scheduled perinatal care visits);</p> <p>Control: Usual Care</p>	<p>IPV exposure – unclear what tool used – may have been disclosure at interview – during pregnancy and postpartum women in the intervention group were statistically less likely to have recurrent episodes of intimate partner violence (adjusted odds ratio 0.48; 95%CI 0.29-0.80); the chance of being an IPV victim at any point in the study was significantly lower in the intervention group (23.3% v 37.8% p=0.006 – no confidence intervals); however postpartum data analysed alone does not reach statistical significance.</p> <p>Pregnancy and birth outcomes – intervention group had fewer very preterm neonates (1.5% v 6.6%; p=0.03) and an increased mean gestational age (38.2±3.3 vs 36.9±5.9; p=0.16)</p> <p>Mental health outcomes – not measured</p> <p>Quality of life – not measured</p>	<p>Risk of selection bias and recall bias; High refusal rate (31% of women approached declined to participate; 15% of those who agreed and met eligibility criteria, declined further participation; Higher attrition rate (26%); imputations were used to control for missing data.</p>

			<p>Help seeking behaviour – measured by resolution of risks in the postpartum period – the intervention group were more successful at resolving all risks (47% v 35% p=0.007) and in resolving some risks (65% v 54% p=0.009).</p>	
<p>Sharps, et al., 2016⁸¹</p>	<p>Women ≥14 years, ≤32 weeks' gestation, screened positive for current IPV, low income enrolled in a perinatal HV programme</p>	<p>Intervention: (acronym DOVE) Brochure-based IPV empowerment intervention embedded into a perinatal HV programme; tailored to a woman's expressed needs and level of danger; delivered during routine HVs – duration up to 2 years postpartum</p>	<p>IPV exposure – measured using CTS2 – there was a significant decrease in IPV at all points from baseline to 24 months postpartum (both intervention and control group) p<0.001). There was also a significant treatment effect (F=6.45; p<0.01). Treatment group had larger mean decrease in IPV scores from baseline (mean 40.82 v 35.87).</p>	<p>Risk of selection bias; high overall attrition rate (55% at 24 months); varied randomisation procedures by site. At urban centres randomisation was by participants (computer generated number assignment), at rural health agencies cluster randomisation was used for 6 sites; method of cluster randomisation- not clear</p>
<p>USA</p>	<p>124 intervention</p> <p>115 Control</p>	<p>Control: Standard home-visiting protocol (4–6 prenatal visits, 6–12 postnatal visits over 2 years)</p>	<p>Pregnancy and birth outcomes – not measured</p> <p>Mental health outcomes – measured using Edinburgh Postnatal Depression Scale – mean levels of maternal deprivation did not differ across groups at any time point in the study (all p>0.05)</p>	

Quality of life – not measured
 Help seeking behaviour – not measured

Taft et al., 2011⁸⁶	106 Primary Care clinics; Women aged 16 and over, pregnant or had at least one child five years or younger, and disclosed IPV or were psychosocially distressed.	Weekly HVs offering non-professional befriending, advocacy, parenting support and referrals – Duration 12 months Control: Usual Clinician Care	IPV exposure – measured using CAS – findings consistently favoured intervention group but did not reach statistical significance – the closest was reduced partner violence: odds of experiencing violence at follow-up adjusted for baseline abuse were 0.47 (95%CI 0.21-1.05).	Enrolled women screened positive for IPV or self-disclosure of IPV status; selection bias; intervention and control arm were not of same size; imputations were used to manage missing data; high attrition
Australia	167 intervention		Pregnancy and birth outcomes – not measured	
	91 control		Mental health outcomes – measured using Edinburgh Postnatal Depression Scale – favoured intervention but did not reach statistical difference Adjusted Difference of OR - 1.90, 95%CI -4.12 to 0.32.	
			Quality of life – measured using SF-36 difference favouring intervention did not reach statistical significance.	
			Help seeking behaviour – not measured	
			In addition – there seemed to be no difference with regard to the Parenting Stress Index.	

Zlotnick et al., 2018⁸³	Perinatal women, 18 years of age or older, English-speaking, and reported experiencing IPV in the past 12 months – now seeking mental health treatment	A computerized based intervention (acronym SURE) delivered on a tablet computer. It included a parrot avatar with a female voice that addresses the participant by name, serves as a guide and narrator for the programme. Focused on personalised safety planning. Optional printouts of related materials; This was followed by a telephone/ in-person 10–15-min booster session to review goals and motivators, barriers to increasing safety behaviours and achieving goals.	IPV exposure –measured using CAS – total victimization scores for women in intervention group decreased by 14.8 points at 4-month follow up and was unchanged in the non-intervention group. The reduction was significant on a paired t-test $p < 0.001$. Each subscale of CAS showed a reduction but only with statistical significance in the emotional subscale.	Small sample size; feasibility study; limited generalisability as single site study; selection bias; response bias; high refusal rate from those invited to participate (32%); attrition rate (8%);
USA	28 intervention	Control: watching brief segments of popular television shows and following up with questions for ratings of their preference.	Pregnancy and birth outcomes – not measured	
	25 control		Mental health outcomes – not measured	
			Quality of life – not measured	
			Help seeking behaviour – not measured	
			In addition, the SURE intervention was scored acceptable and helpful by participants.	

Quality of life

This was examined in one study⁸⁶ using SF-36; this found a difference favouring the intervention group but it did not reach statistical significance, perhaps because of the same recruitment problem mentioned above (under “IPV exposure”).

IPV Knowledge and Safety Promoting Behaviours

One study examined this broad category although it was as part of a complicated study that was concerned with risk behaviours across a range of areas, including smoking, alcohol and drug use as well as IPV.^{79, 80} It was therefore looking at whether the intervention affected any behaviour with regard to those areas. In relation to IPV this meant that its focus was on two behaviours, the development of a safety plan and the development of preventive options, overall termed the resolution of risks in the postpartum period. In this regard, the intervention group were more successful at resolving all risks (47% v 35% p=0.007) and in resolving some risks (65% v 54% p=0.009).

Summary of Findings Relevant to Criterion 9: Criterion not met††

10 publications reporting 9 interventions were reviewed. Studies reviewed various interventions including clinical based advocacy, counselling, CBT and provision of information. No studies were performed in the UK; most were performed in the USA where differences in health care systems as well as wider cultural differences raise doubts as to their applicability. None were focused on men. The evidence favours the interventions with regard to pregnant and postpartum women but it is of insufficient quantity and quality to draw strong conclusions. With regard to non-pregnant women and other groups, there are almost no statistically significant associations on important outcomes such as IPV exposure or mental health outcomes. There are no results of trials strong enough to meet the criteria for this review.

†† **Met** -for example, this should be applied in circumstances in which there is a sufficient volume of evidence of sufficient quality to judge an outcome or effect which is unlikely to be changed by further research or systematic review.

Not Met - for example, this should be applied in circumstances where there is insufficient evidence to clearly judge an outcome or effect or where there is sufficient evidence of poor performance.

Uncertain -for example, this should be applied in circumstances in which the constraints of an evidence summary prevent a reliable answer to the question. An example of this may be when the need for a systematic review and meta-analysis is identified by the rapid review.

Criterion 11 and 13 – Clinical Effectiveness of Screening

11. There should be evidence from high quality randomised controlled trials that the screening programme is effective in reducing mortality or morbidity. Where screening is aimed solely at providing information to allow the person being screened to make an “informed choice” (such as Down’s syndrome or cystic fibrosis carrier screening), there must be evidence from high quality trials that the test accurately measures risk. The information that is provided about the test and its outcome must be of value and readily understood by the individual being screened.

13. The benefit gained by individuals from the screening programme should outweigh any harms, for example from over diagnosis, overtreatment, false positives, false reassurance, uncertain findings and complications. The condition should be an important health problem as judged by its frequency and/or severity. The epidemiology, incidence, prevalence and natural history of the condition should be understood, including development from latent to declared disease and/or there should be robust evidence about the association between the risk or disease marker and serious or treatable disease.

Question 4 – What is the reported effectiveness of partner violence screening for men and women in a healthcare setting?

This question was addressed in the review conducted in 2013.² The review concluded that “comprehensive screening programmes can increase the level of screening (asking about domestic violence) undertaken, disclosure and identification, but to date there is no evidence of reduction in level of such violence or positive health outcomes following screening”. The current review aimed to explore the following specific objectives.

- To estimate the effectiveness of partner violence screening for women in a health setting;
- To estimate the effectiveness of partner violence screening for men in a health setting;
- To estimate the effectiveness of partner violence screening for pregnant women in antenatal care; and
- To estimate the effectiveness of partner violence screening stratified by sub-groups, such as sexual orientation and ethnicity, and by setting such as GP practice or antenatal care, in the UK.

Eligibility for inclusion in the review

Population: Women aged 16 and above with no obvious signs or symptoms of abuse; Men aged 16 and above with no obvious signs or symptoms of abuse.

Intervention: Partner violence screening

Comparator: None or usual care

Outcome: *Primary outcomes:*

- a) Reduced episodes of violence (physical, sexual, and/or psychological)
- b) Prevention of violence as defined by the authors of trials (e.g. during pregnancy, one year after screening or first visit etc.)
- c) Adverse events from intervention, such as increased abuse or other forms of retaliation, emotional distress, labelling, stigma

Secondary outcomes (including but not restricted to):

- a) Identification of partner violence
- b) Information giving and referrals to support agencies (including take-up rates when available)
- c) Physical and psychological morbidity, e.g. physical trauma such as fractures and dislocations, chronic medical conditions, acute mental morbidity such as stress and nightmares, chronic mental health conditions such as PTSD, anxiety depression and sexual trauma, unintended pregnancy, sexually transmitted diseases
- d) Mortality
- e) Maternal outcomes such as miscarriage, antepartum haemorrhage, premature labour, abruptio placenta
- f) Neonatal outcomes such as birthweight, APGAR score first minute, APGAR score fifth minute, stillbirth, perinatal death
- g) Child safety and well-being
- h) Quality of life, social isolation and self-esteem

Study design: Randomised controlled trials; Quasi-experimental studies; Cohort studies; Systematic reviews. (On systematic reviews, see final paragraph of “Methods” section, above.)

Date of publication: 01 January 2007 –June 2018 for women; no date limit for men

Language: English

Description of the evidence

The same search was used for this question as for question 3, above. As such, the database searches yielded 5912 results. Of these, 40 met the criteria for full text review; 4 were included for this question (reporting two studies),⁸⁸⁻⁹¹ and 4

for question 2. The remaining 32 studies were excluded after full text review. The excluded studies and reasons for exclusion are set out in Appendix 3 but, as with question 2, several were conducted in a high-risk area (those settings that NICE recommends proactively asking patients about IPV and those that report higher IPV prevalence rates (with the exception of antenatal settings); as it was decided *a priori* that low risk areas (primary care) and antenatal settings would be prioritised, whereas as high-risk areas would only be included if there was no evidence on low risk areas.

Appendix 2 contained a full PRISMA flow diagram (Figure 1) along with a table of the included publications (Table 10); the excluded papers and their reasons for exclusion are also listed. The 4 papers reporting 2 studies are summarised in Table 11 below.

Discussion of findings

A study-level summary of data extracted from each included publication is presented in Appendix 3. No studies were found addressing the effectiveness of screening for pregnant women in antenatal care, in men, or by ethnicity or sexual orientation. 4 papers reporting 2 studies in non-pregnant women were included. Three papers reported from a single RCT which was a longitudinal 3-year study of 2700 women over 18 years old seeking primary care services. Data was taken at 12 months^{88, 90} and 3 years.⁹¹ The fourth paper reported a small RCT involving women over 18 years old at women's health clinics in a single public hospital.⁸⁹ Both studies were from the USA.

There was also no evidence on the following outcomes: mortality, maternal outcomes, neonatal outcomes, child safety and well-being, as well as the possible harms associated with screening. One study raises the issue of the possibility of harm from screening but does not report it.⁸⁹ Therefore, in the following section, findings of the review are presented for women only as this was the only sub question/ objective with evidence. First, we present the methodological quality of the studies followed by the findings.

The papers were assessed using the relevant CASP tool. The RCT associated with 3 of the papers is of good quality and includes statistical work on missing data. The other paper is a small study, fairly exploratory, and of much lower quality. Both studies had been included in other systematic reviews; the comments from these are summarised in appendix 3.

Table 10. Summary of papers on effectiveness of screening as an intervention

Authors, Year, Country	Population, setting	Intervention	Outcomes	Comments
Klevens et al., 2012⁸⁹ USA	126 Women ≥18 years seeking clinical services who could be separated from a partner or child >3 years: Women’s health clinics (obstetrical, gynaecological, and family planning clinics) at a public hospital 94% non-White	Intervention group A n=46 had PVS administered face-to-face	No statistically significant differences in rates of disclosure between face-to-face and CASI (21% v 9% p = 0.7);	Insufficient information on recruitment, data collection, data analysis, ethics and statement of findings. Insufficient information on ethics and clear statement of findings.
		Intervention group B n=80 had PVS administered by CASI	Screening method preference and use of referral strategies did not differ between the two groups.	
		If positive Intervention group had HCP support and referral	No statistically significant differences between the three groups (HCP support; Video plus list; list only) at 1 week with regard to positive or negative reactions, memory of being asked about IPV.	Small sample size; lack of clarity regarding gender of partners.; limited generalizability; overcomplicated design for small study
		Control had printout of locally available resources OR short video providing support plus the same printout.	At 3 months none had yet sought services from the onsite advocacy service.	
Klevens et al., 2012a,⁸⁸ 2015 2015a,^{91 90}	2700 Women ≥18 years seeking clinical services who could be separated from a partner or child >3 years. 2364 were re-contacted a year later; at 3 years an unstated number were re-contacted; at both 12 months and 3 years data were adjusted for missing-ness.	For 2012/2015A: Group 1: Computerized screening (3-item Partner Violence Screen); women with a positive response to ≥1 question were shown a brief video providing support, information about a hospital-based IPV advocacy program and encouraged to seek help; they were also given a printout	Klevens 2012a: 1-year follow-up (attrition 13% - imputation used for missing data): IPV outcome: no statistically significant differences: exposure based on 18 questions adapted from a National service: Groups 1,2 and 3: Incidents of IPV – G1 96/909; G2 101/893; G3 83/898:	12% lost to follow-up at one year; generalizability limited by the urban setting; Recall bias.

For Klevens 2015a: 1210: G1: 417; G2 404; G3 389.	with resources (e.g., local partner violence advocacy programs, 24-hour hotlines, women’s shelters) (n=909)	Odds ratio: G1vG2 1.2 (CI 0.9-1.6); G1vG3 1.0 (0.8-1.4); G2vG3 1.1 (0.8-1.5)
	For 2015B: Group 1 was compared with Group 2; then both Groups 1 & 2 (i.e. receiving an IPV information intervention of some sort) were compared with Group 3 (usual care – no screening and no information).	Quality of life QOL – measured by SF-12 subscales combined to form 1) a physical health and 2) a mental health composite scale PCS and MCS: no statistically significant differences: PCS at 1-year G1 46.8 (95%CI, 46.1-47.4); G2 46.4 (95%CI, 45.8-47.1); G3 47.2 (95%CI, 46.5-47.8). MCS at 1-year G1 48.3 (95%CI, 47.5-49.1); G2 47.9 (95%CI, 47.2-48.7); G3 47.8 (95%CI, 47-48.5). Hospitalisation at 1 year (mean): no statistically significant differences: G1 0.2 (95%CI, 0-0.3); G2 0.1 (95%CI, 0-0.3); G3 0.2 (95%CI, 0-0.3) Emergency Department visits at 1 year: no statistically significant differences: G1 0.3 (95%CI, 0.2-0.4); G2 0.3 (95%CI, 0.2-0.4); G3 0.3 (95%CI, 0.2-0.4) Ambulatory visits at 1 year: no statistically significant differences: G1 5.4 (95%CI, 3.8-7.0); G2 5.7 (95%CI, 4.1-7.3); G3 5.9 (95%CI, 4.3-7.4)

Klevens 2015: 3-year follow up (attrition not stated although figures are adjusted for missing data).

Hospitalization at 3 years: no statistically significant differences: G1 0.2 (95%CI, 0.1-0.4); G2 0.3 (95%CI, 0.1-0.4); G3 0.2 (95%CI, 0.1-0.4)

ED visits at 3 years: no statistically significant differences: G1 0.6 (95%CI, 0.4-0.8); G2 (95%CI, 0.5-0.9); G3 0.6 (95%CI, 0.4-0.9)

Ambulatory visits at 3 years: no statistically significant differences: G1 12.7 (95%CI, 8.9-16.2); G2 12.2 (95%CI, 8.4-16.1); G3 11.6 (95%CI, 7.7-15.4)

Klevens 2015a:

Knowledge of prevalence of IPV:
Knowledge of negative impact of IPV on health:
Knowledge of availability of services for IPV (i.e. “Yes” if agree with statement “Women who are hurt by their partners can get help if they need it”):
Knowledge of available services for IPV (i.e. “Yes” if can name a local service):
Knowledge of responsibility for IPV (i.e. the woman is not to

blame)

Women divided into further four subgroups based on exposure to IPV: 1) in lifetime 2) in year prior to enrolment 3) in year following enrolment 4) never. Total = 2362 of which 1210 experienced some form of IPV.

No differences in any item of knowledge was found across these subgroups except “responsibility for IPV”: full data analysis is not provided but the authors report that “there were no differences between women screened and provided with a IPV resource list compared to a control group as to women’s awareness of the frequency of IPV, its impact on physical or mental health, or the availability of IPV services in their community. However, among women who were victims of IPV in the year before or year after enrolment, those who were provided a list of IPV resources without screening were significantly less likely to know that IPV is not the victim’s fault than those in the control or list plus screening conditions [i.e. groups].”

Effectiveness of partner violence screening for women in a health setting

The large RCT^{88, 91} looked at screening using the 3-item PVS. There were three study groups: group 1 received the PVS via Computer-Assisted Self-Interview (CASI) and were provided with a local resource list and shown an information video if they screened positive; group 2 received no screening, but were provided with the local resource list; group 3 received no screening or resource list. At 1-year, the groups were compared for incidents of IPV, quality of life (mental and physical health), hospitalisation, Emergency Department (ED) visits and ambulatory visits (i.e. out-patient visits). At 3-years, the groups were compared for hospitalization, ED visits and ambulatory visits. No significant differences were found across the three groups for any of the outcomes at 1-year or at 3-years.

Another study based on the same RCT⁹⁰ examined knowledge and attitudes regarding IPV at 1 year in the same participants. The data are cut into various groups based on the intervention received plus the women's own experience of IPV. The key finding is that no differences were found on the basis of either the type of intervention; this is with one fairly minor exception: "women who were provided a list of IPV resources without screening were significantly less likely to know that IPV is not the victim's fault than those in the control or list plus screening conditions [i.e. groups]".

In the second study, Klevens and colleagues⁸⁹ tested the accuracy of PVS administered face-to-face and by CASI: this is reported in the previous section looking at criterion 4. However, if the PVS via either method was positive, the trial went on to examine the effect of three types of support. The first was face-to-face healthcare professional support and referral to relevant agencies – this was provided to those who had completed the PVS face-to-face. Those who completed the CASI either received a printout of local resources and encouragement to contact these or they received a short video clip talking about support and encouraging help seeking, plus the printout of resources. 126 women were randomised to the study (46 face-to-face). At one week, 96% recalled receiving the list: 4/36 (11%) of those screened by healthcare professional had taken up services from the list versus 2/66 (3%) of the comparator group.

Summary of Findings Relevant to Criterion 11 & 13: Criteria not met^{‡‡}

There were only 2 studies found addressing the effectiveness of screening. These studies found no statistically significant effect from screening as an intervention across an important range of outcomes. These included IPV exposure, physical harms as marked by emergency department visits, hospitalisation or ambulatory visits, physical or mental health and quality of life, and knowledge concerning IPV and available resources.

In addition, there were no studies addressing the outcomes of harms from screening, mortality, maternal outcomes, neonatal outcomes, child safety and well-being. Furthermore, both studies were conducted in the USA, and therefore, have limited applicability to the UK. The quality of the studies was mixed but one was a good quality RCT. There were no studies in men, pregnant women, or any stratified by ethnicity or sexual orientation.

Therefore, there remains insufficient evidence to show any form of IPV screening in this population was effective in reducing mortality and morbidity or any other benefits. There was also no evidence assessing whether any form of IPV screening in this population causes any harm, therefore it is not known whether screening provides more benefit over harm. As a result, this criterion is not met.

^{‡‡} **Met** -for example, this should be applied in circumstances in which there is a sufficient volume of evidence of sufficient quality to judge an outcome or effect which is unlikely to be changed by further research or systematic review.

Not Met - for example, this should be applied in circumstances where there is insufficient evidence to clearly judge an outcome or effect or where there is sufficient evidence of poor performance.

Uncertain -for example, this should be applied in circumstances in which the constraints of an evidence summary prevent a reliable answer to the question. An example of this may be when the need for a systematic review and meta-analysis is identified by the rapid review.

Review summary

Conclusions and implications for policy

This updated analysis of the evidence for a population-wide screening programme for IPV in the general population or in the antenatal population against the UK NSC criteria did not identify sufficient evidence to support a change in the previous recommendation. The quality, quantity, applicability and consistency of evidence for each question examined was as follows.

Question 1 concerned prevalence. In terms of the general population, the crime surveys across the four nations of the UK provide good quality evidence although they do not use identical definitions, such that it was not always possible to distinguish domestic abuse from IPV. There were also variations in the sub-group data available, for example, on same-sex IPV. The police data shares the same issue regarding definitions and is, overall, not as good as that of the crime surveys. Turning from the general population to clinically defined populations, the focus of this review was primarily on general practice or clinics caring for women in the perinatal period; there were a small number of studies and the samples were generally small; there were also different tools used in finding IPV. As such, the data was not consistent or always of high quality.

The data from police statistics and crime surveys (plus the APMS) in the UK show that rates of IPV for men and women are high, ranging from 28.9% for women and 13.2% for men in England and Wales to 18.5% and 9.2% in Scotland and 15.1% and 8.4% in Northern Ireland. Clinical data support the prevalence rates of IPV found in the general population, although HIV clinics had strikingly high levels. However, there was insufficient data from other clinical areas to draw any conclusions by setting. Similarly, there was insufficient data related to pregnant women, sexual orientation, and ethnicity, although the limited data showed no strong trends in relation to ethnicity. There is a particular need for more research by setting either as a focus or as sub-group analysis, for example, general practice areas.

Question 2 concerned screening accuracy. An important limitation of these studies, which were otherwise of fair to good quality, is that they concerned fairly specific populations outside of the UK, such as US army veterans; this raises

concerns about their applicability to UK population. The use of different gold-standards might raise concerns about consistency. There was insufficient evidence on the accuracy of all of the screening tests used in primary or perinatal care found in the review. There was only one UK-based good quality study which showed that the four-item HARK tool had good accuracy against the 30-item CAS in a population of women attending a GP practice in east London (Sensitivity 81% [95 CI 69-90], Specificity 95% [91-98], PPV 83%, NPV 94%). However, as there was only one study it is insufficient to recommend HARK in the UK. One Canadian study showed good levels of precision in a tool developed for abuse within gay relationships. There was insufficient information with regard to pregnant women and no tools for IPV screening in men outside of gay relationships.

Question 3 concerned the effectiveness of interventions after positive screening. A small number of reasonable quality-controlled studies revealed a marked inconsistency in findings between pregnant women, where interventions seemed more successful, and women not known to be pregnant. Again, there were no UK-based studies, raising the same concerns about applicability of findings. In addition, while interventions demonstrate an increase in self-efficacy, safety behaviour and knowledge about IPV and its impact, the difference between the intervention and control arm is often not statistically significant. There are a number of interesting and promising interventions. However, little research has been conducted in the UK. Given the cultural specifics of IPV, there are serious applicability concerns and these interventions would need to be investigated on a UK population before conclusions can be drawn. We found no research specific to men as victims, or specifically related to ethnic minorities, although much of the US-based research was undertaken with minority groups. There was inconsistency in the results for pregnant women and those for non-pregnant women.

Question 4 concerned screening effectiveness in terms of outcomes such as reduced IPV; in other words, does screening in and of itself (with perhaps a small intervention run with the screening itself) have worthwhile outcomes. Here there were only two studies reported. One of these studies was a high-quality RCT.

Only two trials (reported in four papers) explored the effectiveness of partner violence screening in primary or perinatal care. Neither study showed any

important, statistically significant, difference between the screened and non-screened group in GP practices. There was no data on the possible harms associated with screening in the papers included in this review. There was also no data on the effectiveness of partner violence screening for men, pregnant women in antenatal care or by sexual orientation, ethnicity, or setting. Screening for IPV is unlike screening for most other health conditions as the person screened will usually know they have the ‘condition’ and screening aims to get them to pass that information on to the health care team. Furthermore, the ‘condition’ involves the, sometimes criminal, behaviour of the partner; it may also involve both parties⁹², an area which is little investigated in the literature reviewed. The need to consider which outcomes can realistically be found in an RCT should also be considered, with at least one group of researchers concerned that reduction in violence is unlikely to be achieved in the lifetime of an RCT.

Limitations

Limitations of this review should be considered when interpreting results. As mentioned earlier, only one study originated from the UK with most of the remainder being conducted in Australia and US. While there are some similarities in culture, language and healthcare systems of these countries with the UK, applicability of the findings to the UK context may be limited. The review only focussed in ‘asymptomatic’ populations, those without obvious manifestations of IPV. The review did not explore literature related to signs and symptoms that should trigger IPV screening or interventions. The review found little information about screening on men, and by sexual orientation. In addition, information about ethnicity of the IPV victims is often limited. The review only focussed on studies conducted in antenatal, postnatal setting and general practice. No studies conducted in ED or other high-risk health settings were included.

More research is needed on almost all aspects of screening for IPV in the UK, from where there is currently little data. More widely, there is less evidence related to sub-groups such as men and LGBT people, and little detail on black and minority ethnic (BME) communities, and on older people. There is insufficient detail in most studies regarding possible harms as well as benefits of screening. There is also a technical issue raised in one report regarding what outcomes can reasonably be expected from screening and related interventions⁴⁴: should it be the behaviour and knowledge of those at risk, for example, or actual rates of IPV; the latter may be hard to detect within the timescale of most studies

Appendix 1 — Search strategy

Electronic databases

The search strategies were used to search the databases shown in 11. MEDLINE PsycINFO, Embase, Cochrane Library. Synonyms for ‘intimate partner violence’ were used to search the King’s Fund website.

Table 11. Summary of electronic database searches and dates

Database	Platform	Searched on date	Date range of search
Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R) 1946 to October 24, 2018	Ovid SP	[October 2018]	2007 to current
PsycINFO 1967 to October Week 4 2018	Ovid SP	[October 2018]	2007 to current
Database:Embase <1974 to 2019 February 25>	Ovid SP	[February 2019]	2007 to current
Cochrane Library	Wiley	[February 2019]	2007 to current
The King’s Fund	https://www.kingsfund.org.uk/	[February 2019]	Inception to current

Search Terms

Search terms included combinations of free text and subject headings grouped into the following categories:

Search One- Prevalence

- disease area: **IPV**
- study design: **ALL**
- other term group: **Prevalence terms / UK filter**

Search Two- Screening

- disease area: **IPV**
- study design: **ALL**
- other term group: **Screening**

Search Three - Intervention

- disease area: **IPV**
- study design: **ALL**
- other term group: **Interventions**

Search Strategies are presented below; all were limited to 2007 to current. We were required to include studies on men (for all four questions) without date limits. To achieve this, we conducted separate searches for men only for all questions prior to 2007. A sample of 1000 search results were reviewed (title and abstract) to determine the number of studies identified. However, only a small number of studies (n=4) were identified which were then found to be irrelevant and therefore were excluded. The Prevalence search was also limited to UK studies using a validated study filter from NICE*.

Search One – Prevalence

Database: Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R) <1946 to January 16, 2019>

Search Strategy:

-
- 1 domestic violence/ or intimate partner violence/ or spouse abuse/
 - 2 Battered Women/
 - 3 ((domestic or partner or spouse or spousal) and (violence or abuse)).ti,ab.
 - 4 (intimate partner violence or battered wife or battered husband* or battered wives).ti,ab.
 - 5 1 or 2 or 3 or 4
 - 6 (epidemiol* or incidence or prevalence).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
 - 7 Epidemiology/
 - 8 exp Epidemiologic Methods/
 - 9 6 or 7 or 8
 - 10 5 and 9
 - 11 exp Great Britain/

12 (national health service* or nhs*).ti,ab,in.

13 (english not ((published or publication* or translat* or written or language* or speak* or literature or citation*) adj5 english)).ti,ab.

14 (gb or "g.b." or britain* or (british* not "british columbia") or uk or "u.k." or united kingdom* or (england* not "new england") or northern ireland* or northern irish* or scotland* or scottish* or ((wales or "south wales") not "new south wales") or welsh*).ti,ab,jw,in. (1886977)

15 (bath or "bath's" or ((birmingham not alabama*) or ("birmingham's" not alabama*) or bradford or "bradford's" or brighton or "brighton's" or bristol or "bristol's" or carlisle* or "carlisle's" or (cambridge not (massachusetts* or boston* or harvard*)) or ("cambridge's" not (massachusetts* or boston* or harvard*)) or (canterbury not zealand*) or ("canterbury's" not zealand*) or chelmsford or "chelmsford's" or chester or "chester's" or chichester or "chichester's" or coventry or "coventry's" or derby or "derby's" or (durham not (carolina* or nc)) or ("durham's" not (carolina* or nc)) or ely or "ely's" or exeter or "exeter's" or gloucester or "gloucester's" or hereford or "hereford's" or hull or "hull's" or lancaster or "lancaster's" or leeds* or leicester or "leicester's" or (lincoln not nebraska*) or ("lincoln's" not nebraska*) or (liverpool not (new south wales* or nsw)) or ("liverpool's" not (new south wales* or nsw)) or ((london not (ontario* or ont or toronto*)) or ("london's" not (ontario* or ont or toronto*)) or manchester or "manchester's" or (newcastle not (new south wales* or nsw)) or ("newcastle's" not (new south wales* or nsw)) or norwich or "norwich's" or nottingham or "nottingham's" or oxford or "oxford's" or peterborough or "peterborough's" or plymouth or "plymouth's" or portsmouth or "portsmouth's" or preston or "preston's" or ripon or "ripon's" or salford or "salford's" or salisbury or "salisbury's" or sheffield or "sheffield's" or southampton or "southampton's" or st albans or stoke or "stoke's" or sunderland or "sunderland's" or truro or "truro's" or wakefield or "wakefield's" or wells or westminster or "westminster's" or winchester or "winchester's" or wolverhampton or "wolverhampton's" or (worcester not (massachusetts* or boston* or harvard*)) or ("worcester's" not (massachusetts* or boston* or harvard*)) or (york not ("new york*" or ny or ontario* or ont or toronto*)) or ("york's" not ("new york*" or ny or ontario* or ont or toronto*)))))).ti,ab,in.

16 (bangor or "bangor's" or cardiff or "cardiff's" or newport or "newport's" or st asaph or "st asaph's" or st davids or swansea or "swansea's").ti,ab,in.

17 11 or 12 or 13 or 14 or 15 or 16

18 10 and 17

Database: PsycINFO <1967 to October Week 4 2018>

Search Strategy:

1 Domestic Violence/ or Intimate Partner Violence/ or Partner abuse/
2 Battered Females/
3 ((domestic or partner or spouse or spousal) and (violence or abuse)).ti,ab.
4 (intimate partner violence or battered wife or battered husband* or battered
wives).ti,ab.
5 1 or 2 or 3 or 4
6 (epidemiol* or incidence or prevalence).mp.
7 epidemiology/
8 6 or 7
9 5 and 8
10 (control: or effectiveness or risk:).tw.
11 9 and 10
12 9 not 11
13 exp Great Britain/
14 (national health service* or nhs*).ti,ab,in.
15 (english not ((published or publication* or translat* or written or language* or
speak* or literature or citation*) adj5 english)).ti,ab.
16 (gb or "g.b." or britain* or (british* not "british columbia") or uk or "u.k." or
united kingdom* or (england* not "new england") or northern ireland* or northern
irish* or scotland* or scottish* or ((wales or "south wales") not "new south wales")
or welsh*).ti,ab,jw,in.
17 (bath or "bath's" or ((birmingham not alabama*) or ("birmingham's" not
alabama*) or bradford or "bradford's" or brighton or "brighton's" or bristol or
"bristol's" or carlisle* or "carlisle's" or (cambridge not (massachusetts* or boston*
or harvard*)) or ("cambridge's" not (massachusetts* or boston* or harvard*)) or
(canterbury not zealand*) or ("canterbury's" not zealand*) or chelmsford or
"chelmsford's" or chester or "chester's" or chichester or "chichester's" or coventry
or "coventry's" or derby or "derby's" or (durham not (carolina* or nc)) or ("durham's"
not (carolina* or nc)) or ely or "ely's" or exeter or "exeter's" or gloucester or
"gloucester's" or hereford or "hereford's" or hull or "hull's" or lancaster or
"lancaster's" or leeds* or leicester or "leicester's" or (lincoln not nebraska*) or
("lincoln's" not nebraska*) or (liverpool not (new south wales* or nsw)) or
("liverpool's" not (new south wales* or nsw)) or ((london not (ontario* or ont or
toronto*)) or ("london's" not (ontario* or ont or toronto*)) or manchester or
"manchester's" or (newcastle not (new south wales* or nsw)) or ("newcastle's" not
(new south wales* or nsw)) or norwich or "norwich's" or nottingham or
"nottingham's" or oxford or "oxford's" or peterborough or "peterborough's" or
plymouth or "plymouth's" or portsmouth or "portsmouth's" or preston or "preston's"
or ripon or "ripon's" or salford or "salford's" or salisbury or "salisbury's" or sheffield

or "sheffield's" or southampton or "southampton's" or st albans or stoke or "stoke's"
or sunderland or "sunderland's" or truro or "truro's" or wakefield or "wakefield's" or
wells or westminster or "westminster's" or winchester or "winchester's" or
wolverhampton or "wolverhampton's" or (worcester not (massachusetts* or
boston* or harvard*)) or ("worcester's" not (massachusetts* or boston* or
harvard*)) or (york not ("new york*" or ny or ontario* or ont or toronto*)) or ("york's"
not ("new york*" or ny or ontario* or ont or toronto*))))).ti,ab,in.

18 (bangor or "bangor's" or cardiff or "cardiff's" or newport or "newport's" or st
asaph or "st asaph's" or st davids or swansea or "swansea's").ti,ab,in.

19 13 or 14 or 15 or 16 or 17 or 18

20 12 and 19

Database: Embase <1974 to 2019 February 25>

Search Strategy:

-
- 1 domestic violence/ or partner violence/
 - 2 battered woman/
 - 3 ((domestic or partner or spouse or spousal) and (violence or abuse)).ti,ab.
 - 4 (intimate partner violence or battered wife or battered husband* or battered
wives).ti,ab.
 - 5 1 or 2 or 3 or 4
 - 6 (epidemiol* or incidence or prevalence).mp. [mp=title, abstract, heading word,
drug trade name, original title, device manufacturer, drug manufacturer, device
trade name, keyword, floating subheading word, candidate term word]
 - 7 Epidemiology/
 - 8 6 or 7
 - 9 5 and 8
 - 10 exp Great Britain/
 - 11 (national health service* or nhs*).ti,ab,in.
 - 12 (english not ((published or publication* or translat* or written or language* or
speak* or literature or citation*) adj5 english)).ti,ab.
 - 13 (gb or "g.b." or britain* or (british* not "british columbia") or uk or "u.k." or
united kingdom* or (england* not "new england") or northern ireland* or northern
irish* or scotland* or scottish* or ((wales or "south wales") not "new south wales")
or welsh*).ti,ab,jw,in.
 - 14 (bath or "bath's" or ((birmingham not alabama*) or ("birmingham's" not
alabama*) or bradford or "bradford's" or brighton or "brighton's" or bristol or
"bristol's" or carlisle* or "carlisle's" or (cambridge not (massachusetts* or boston*
or harvard*)) or ("cambridge's" not (massachusetts* or boston* or harvard*)) or

(canterbury not zealand*) or ("canterbury's" not zealand*) or chelmsford or "chelmsford's" or chester or "chester's" or chichester or "chichester's" or coventry or "coventry's" or derby or "derby's" or (durham not (carolina* or nc)) or ("durham's" not (carolina* or nc)) or ely or "ely's" or exeter or "exeter's" or gloucester or "gloucester's" or hereford or "hereford's" or hull or "hull's" or lancaster or "lancaster's" or leeds* or leicester or "leicester's" or (lincoln not nebraska*) or ("lincoln's" not nebraska*) or (liverpool not (new south wales* or nsw)) or ("liverpool's" not (new south wales* or nsw)) or ((london not (ontario* or ont or toronto*)) or ("london's" not (ontario* or ont or toronto*)) or manchester or "manchester's" or (newcastle not (new south wales* or nsw)) or ("newcastle's" not (new south wales* or nsw)) or norwich or "norwich's" or nottingham or "nottingham's" or oxford or "oxford's" or peterborough or "peterborough's" or plymouth or "plymouth's" or portsmouth or "portsmouth's" or preston or "preston's" or ripon or "ripon's" or salford or "salford's" or salisbury or "salisbury's" or sheffield or "sheffield's" or southampton or "southampton's" or st albans or stoke or "stoke's" or sunderland or "sunderland's" or truro or "truro's" or wakefield or "wakefield's" or wells or westminster or "westminster's" or winchester or "winchester's" or wolverhampton or "wolverhampton's" or (worcester not (massachusetts* or boston* or harvard*)) or ("worcester's" not (massachusetts* or boston* or harvard*)) or (york not ("new york*" or ny or ontario* or ont or toronto*)) or ("york's" not ("new york*" or ny or ontario* or ont or toronto*))))).ti,ab,in. (2215022)

15 (bangor or "bangor's" or cardiff or "cardiff's" or newport or "newport's" or st asaph or "st asaph's" or st davids or swansea or "swansea's").ti,ab,in.

16 10 or 11 or 12 or 13 or 14 or 15

17 9 and 16

Search Name: IPV COCHRANE Prevalence

Last Saved: 21/02/2019 11:00:45

- | ID | Search |
|----|--|
| #1 | MeSH descriptor: [Domestic Violence] this term only |
| #2 | MeSH descriptor: [Spouse Abuse] this term only |
| #3 | MeSH descriptor: [Intimate Partner Violence] this term only |
| #4 | MeSH descriptor: [Battered Women] this term only |
| #5 | (domestic or partner or spouse or spousal):ti,kw,ab |
| #6 | (violence or abuse):ti,kw,ab |
| #7 | #5 and #6 |
| #8 | (intimate partner violence or battered wife or battered husband* or battered wives):ti,kw,ab |

- #9 #1 or #2 or #3 or #4 or #7 or #8
- #10 MeSH descriptor: [Epidemiology] this term only
- #11 MeSH descriptor: [Epidemiologic Methods] explode all trees
- #12 (epidemiol* or incidence or prevalence):ti,ab,kw
- #13 #10 or #11 or #12
- #14 #9 and #13

Search Two – Screening

Database: Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R) <1946 to January 16, 2019>

Search Strategy:

-
- 1 domestic violence/ or intimate partner violence/ or spouse abuse/
 - 2 Battered Women/
 - 3 ((domestic or partner or spouse or spousal) and (violence or abuse)).ti,ab.
 - 4 (intimate partner violence or battered wife or battered husband* or battered wives).ti,ab.
 - 5 1 or 2 or 3 or 4
 - 6 (screen* or risk assess* or diagnosis).ti,ab.
 - 7 Mass Screening/
 - 8 Risk assessment/
 - 9 Diagnosis/
 - 10 "Surveys and Questionnaires"/
 - 11 ('Hurts Insults threatens and screams').mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
 - 12 (Womens Experience with Battering Scale or Ongoing Violence Assessment Tool Abuse Assessment Screen or Partner Violence Screen or Woman Abuse Screening Tool or Slapped Threatened or Thrown scale or Behavioural Risk Factor Surveillance Survey or Perinatal Self-Administered Inventory or Abuse Assessment Screen).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
 - 13 (Composite Abuse Scale or Woman Abuse Screening Tool-Short Form or Index of Spouse Abuse or Abuse Assessment Screen-Disability or Violence

Against Women Screen or Revised Conflict Tactics Scale-Short or Antenatal Psychosocial Health Assessment or Abuse Risk Inventory or Partner Abuse Interview or Partner Violence Screen or STaT).mp.

14 (HITS or WEB or OVAT or AAS or PVS or WAST or STaT or BRFS or PSAI or CAS or WAS or WAST or WAST-SF or ISP or VAWS or CTS or ALPHA or HARK or ARI or SAFE-T).mp.

15 ('Humiliation Afraid Rape and Kick').mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]

16 'Do you feel safe at home'.mp.

17 (Short-Form health survey or SF-36 or SF 36 or SF36 or General Health Questionnaire or GHQ or fracture* or bruise* or chronic health disorder* or gynaecological or chronic pain or gastrointestinal disorder* or psychosocial health or depression or Beck Depression Inventory or BDI or Center for Epidemiologic Studies Depression Scale or CES-D or post-traumatic stress or Impact of Events Scale or IES or Post-traumatic Stress Disorder Checklist or PCL or anxiety or Spielbergers State-Trait Anxiety Inventory or STAI or Beck Anxiety Inventory or BAI or self efficacy or self-efficacy or Generalized Perceived Self-Efficacy Scale or GSE Sherers Self-Efficacy Scale or SES or self esteem or self-esteem or Rosenberg Self-Esteem Scale or SES or Coopersmith Self-Esteem Inventory or CSEI or quality of life or WHO Quality of Life-Bref).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]

18 or/6-17

19 5 and 18

Database: PsycINFO <1967 to October Week 4 2018>

Search Strategy:

-
- 1 Domestic Violence/ or Intimate Partner Violence/ or Partner abuse/
 - 2 Battered Females/
 - 3 ((domestic or partner or spouse or spousal) and (violence or abuse)).ti,ab.
 - 4 (intimate partner violence or battered wife or battered husband* or battered wives).ti,ab.
 - 5 1 or 2 or 3 or 4

- 6 (screen* or risk assess* or diagnosis).ti,ab.
- 7 Screening/
- 8 Risk Assessment/
- 9 Diagnosis/
- 10 Surveys/ or Questionnaires/
- 11 ('Hurts Insults threatens and screams').mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
- 12 (Womens Experience with Battering Scale or Ongoing Violence Assessment Tool Abuse Assessment Screen or Partner Violence Screen or Woman Abuse Screening Tool or Slapped Threatened or Thrown scale or Behavioural Risk Factor Surveillance Survey or Perinatal Self-Administered Inventory or Abuse Assessment Screen).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
- 13 (Composite Abuse Scale or Woman Abuse Screening Tool-Short Form or Index of Spouse Abuse or Abuse Assessment Screen-Disability or Violence Against Women Screen or Revised Conflict Tactics Scale-Short or Antenatal Psychosocial Health Assessment or Abuse Risk Inventory or Partner Abuse Interview or Partner Violence Screen or STaT).mp.
- 14 (HITS or WEB or OVAT or AAS or PVS or WAST or STaT or BRFSS or PSAI or CAS or WAS or WAST or WAST-SF or ISP or VAWS or CTS or ALPHA or HARK or ARI or SAFE-T).mp.
- 15 ('Humiliation Afraid Rape and Kick').mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
- 16 'Do you feel safe at home'.mp.
- 17 (Short-Form health survey or SF-36 or SF 36 or SF36 or General Health Questionnaire or GHQ or fracture* or bruise* or chronic health disorder* or gynaecological or chronic pain or gastrointestinal disorder* or psychosocial health or depression or Beck Depression Inventory or BDI or Center for Epidemiologic Studies Depression Scale or CES-D or post-traumatic stress or Impact of Events Scale or IES or Post-traumatic Stress Disorder Checklist or PCL or anxiety or Spielbergers State-Trait Anxiety Inventory or STAI or Beck Anxiety Inventory or BAI or self efficacy or self-efficacy or Generalized Perceived Self-Efficacy Scale or GSE Sherers Self-Efficacy Scale or SES or self esteem or self-esteem or Rosenberg Self-Esteem Scale or SES or Coopersmith Self-Esteem Inventory or CSEI or quality of life or WHO Quality of Life-Bref).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
- 18 or/6-17
- 19 5 and 18

Database: Embase <1974 to 2019 February 25>

Search Strategy:

-
- 1 domestic violence/ or partner violence/
 - 2 Battered Women/
 - 3 ((domestic or partner or spouse or spousal) and (violence or abuse)).ti,ab.
 - 4 (intimate partner violence or battered wife or battered husband* or battered wives).ti,ab.
 - 5 1 or 2 or 3 or 4
 - 6 (screen* or risk assess* or diagnosis).ti,ab.
 - 7 Mass Screening/
 - 8 Risk assessment/
 - 9 Diagnosis/
 - 10 health survey/
 - 11 ('Hurts Insults threatens and screams').mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]
 - 12 (Womens Experience with Battering Scale or Ongoing Violence Assessment Tool Abuse Assessment Screen or Partner Violence Screen or Woman Abuse Screening Tool or Slapped Threatened or Thrown scale or Behavioural Risk Factor Surveillance Survey or Perinatal Self-Administered Inventory or Abuse Assessment Screen).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]
 - 13 (Composite Abuse Scale or Woman Abuse Screening Tool-Short Form or Index of Spouse Abuse or Abuse Assessment Screen-Disability or Violence Against Women Screen or Revised Conflict Tactics Scale-Short or Antenatal Psychosocial Health Assessment or Abuse Risk Inventory or Partner Abuse Interview or Partner Violence Screen or STaT).mp.
 - 14 (HITS or WEB or OVAT or AAS or PVS or WAST or STaT or BRFSS or PSAI or CAS or WAS or WAST or WAST-SF or ISP or VAWS or CTS or ALPHA or HARK or ARI or SAFE-T).mp.
 - 15 ('Humiliation Afraid Rape and Kick').mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]
 - 16 'Do you feel safe at home'.mp.
 - 17 (Short-Form health survey or SF-36 or SF 36 or SF36 or General Health Questionnaire or GHQ or fracture* or bruise* or chronic health disorder* or gynaecological or chronic pain or gastrointestinal disorder* or psychosocial health or depression or Beck Depression Inventory or BDI or Center for Epidemiologic

Studies Depression Scale or CES-D or post-traumatic stress or Impact of Events Scale or IES or Post-traumatic Stress Disorder Checklist or PCL or anxiety or Spielbergers State-Trait Anxiety Inventory or STAI or Beck Anxiety Inventory or BAI or self efficacy or self-efficacy or Generalized Perceived Self-Efficacy Scale or GSE Sherers Self-Efficacy Scale or SES or self esteem or self-esteem or Rosenberg Self-Esteem Scale or SES or Coopersmith Self-Esteem Inventory or CSEI or quality of life or WHO Quality of Life-Bref).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]

18 or/6-17

19 5 and 18

Search Name: IPV COCHRANE

Last Saved: 25/02/2019 13:08:53

ID Search

#1 MeSH descriptor: [Domestic Violence] this term only

#2 MeSH descriptor: [Spouse Abuse] this term only

#3 MeSH descriptor: [Intimate Partner Violence] this term only

#4 MeSH descriptor: [Battered Women] this term only

#5 (domestic or partner or spouse or spousal):ti,kw,ab

#6 (violence or abuse):ti,kw,ab

#7 #5 and #6

#8 (intimate partner violence or battered wife or battered husband* or battered wives):ti,kw,ab

#9 #1 or #2 or #3 or #4 or #7 or #8

#10 (screen* or risk assess* or diagnosis):ti,ab,kw

#11 MeSH descriptor: [Mass Screening] this term only

#12 MeSH descriptor: [Risk Assessment] this term only

#13 MeSH descriptor: [Diagnosis] this term only

#14 MeSH descriptor: [Surveys and Questionnaires] this term only

#15 ('Hurts Insults threatens and screams'):ti,ab,kw

#16 (Womens Experience with Battering Scale or Ongoing Violence Assessment Tool Abuse Assessment Screen or Partner Violence Screen or Woman Abuse Screening Tool or Slapped Threatened or Thrown scale or Behavioural Risk Factor Surveillance Survey or Perinatal Self-Administered Inventory or Abuse Assessment Screen):ti,ab,kw

#17 (Composite Abuse Scale or Woman Abuse Screening Tool-Short Form or Index of Spouse Abuse or Abuse Assessment Screen-Disability or Violence Against Women Screen or Revised Conflict Tactics Scale-Short or Antenatal

Psychosocial Health Assessment or Abuse Risk Inventory or Partner Abuse Interview or Partner Violence Screen or STaT):ti,ab,kw

#18 (HITS or WEB or OVAT or AAS or PVS or WAST or STaT or BRFSS or PSAI or CAS or WAS or WAST or WAST-SF or ISP or VAWS or CTS or ALPHA or HARK or ARI or SAFE-T):ti,ab,kw

#19 ('Humiliation Afraid Rape and Kick'):ti,ab,kw

#20 ('Do you feel safe at home'):ti,ab,kw

#21 (Short-Form health survey or SF-36 or SF 36 or SF36 or General Health Questionnaire or GHQ or fracture* or bruise* or chronic health disorder* or gynaecological or chronic pain or gastrointestinal disorder* or psychosocial health or depression or Beck Depression Inventory or BDI or Center for Epidemiologic Studies Depression Scale or CES-D or post-traumatic stress or Impact of Events Scale or IES or Post-traumatic Stress Disorder Checklist or PCL or anxiety or Spielbergers State-Trait Anxiety Inventory or STAI or Beck Anxiety Inventory or BAI or self efficacy or self-efficacy or Generalized Perceived Self-Efficacy Scale or GSE Sherers Self-Efficacy Scale or SES or self esteem or self-esteem or Rosenberg Self-Esteem Scale or SES or Coopersmith Self-Esteem Inventory or CSEI or quality of life or WHO Quality of Life-Bref):ti,ab,kw

#22 #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19 or #20 OR #21

#23 #9 AND #22

Search Three - Intervention

Database: Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R) <1946 to January 16, 2019>

Search Strategy:

-
- 1 domestic violence/ or intimate partner violence/ or spouse abuse/
 - 2 Battered Women/
 - 3 ((domestic or partner or spouse or spousal) and (violence or abuse)).ti,ab.
 - 4 (intimate partner violence or battered wife or battered husband* or battered wives).ti,ab.
 - 5 1 or 2 or 3 or 4
 - 6 (counselling or counseling or psychological therapy or psychotherapy or advocacy or social support or behaviour checklist* or behavior checklist* or refuge or shelter or brief intervention or outreach or safety behaviour* or safety behavior* or shelter* or treatment programme* or treatment program* or support group* or story-telling or storytelling or reminiscence or expressive writing or forgiveness therapy or discussion* or self-evaluation or self evaluation or problem solving or

problem-solving or breathing control or exposure therapy or flashback* or cognitive therapy or cognitive behavioural therapy or cognitive behavioral therapy or empowerment or skill building or skill-building or assertive* or crisis intervention or problem solving or psychoeducation or psycho-education or grief resolution or case management or relationship safety or self-esteem or self esteem or information or safety planning or stress management or loss or grief or empowerment or crisis-intervention or perinatal home-visiting or wallet-size card* or community resources or life skills or home social support).mp. or (perpetrator adj4 (treatment or programme* or program*)).ti,ab. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]

7 Counseling/

8 exp Psychotherapy/

9 6 or 7 or 8

10 5 and 9

PsycINFO

Database: PsycINFO <1967 to October Week 4 2018> Search Strategy:

1 Domestic Violence/ or Intimate Partner Violence/ or Partner abuse/

2 Battered Females/

3 ((domestic or partner or spouse or spousal) and (violence or abuse)).ti,ab.

4 (intimate partner violence or battered wife or battered husband* or battered wives).ti,ab.

5 1 or 2 or 3 or 4

6 (counselling or counseling or psychological therapy or psychotherapy or advocacy or social support or behaviour checklist* or behavior checklist* or refuge or shelter or brief intervention or outreach or safety behaviour* or safety behavior* or shelter* or treatment programme* or treatment program* or support group* or story-telling or storytelling or reminiscence or expressive writing or forgiveness therapy or discussion* or self-evaluation or self evaluation or problem solving or problem-solving or breathing control or exposure therapy or flashback* or cognitive therapy or cognitive behavioural therapy or cognitive behavioral therapy or empowerment or skill building or skill-building or assertive* or crisis intervention or problem solving or psychoeducation or psycho-education or grief resolution or case management or relationship safety or self-esteem or self esteem or information or safety planning or stress management or loss or grief or empowerment or crisis-intervention or perinatal home-visiting or wallet-size card*

or community resources or life skills or home social support).mp. or (perpetrator adj4 (treatment or programme* or program*)).ti,ab.

7 exp Psychotherapy/

8 exp Counseling/

9 6 or 7 or 8

10 5 and 9

Database: Embase <1974 to 2019 February 25>

Search Strategy:

1 domestic violence/ or partner violence/

2 battered woman/

3 ((domestic or partner or spouse or spousal) and (violence or abuse)).ti,ab.

4 (intimate partner violence or battered wife or battered husband* or battered wives).ti,ab.

5 1 or 2 or 3 or 4

6 (counselling or counseling or psychological therapy or psychotherapy or advocacy or social support or behaviour checklist* or behavior checklist* or refuge or shelter or brief intervention or outreach or safety behaviour* or safety behavior* or shelter* or treatment programme* or treatment program* or support group* or story-telling or storytelling or reminiscence or expressive writing or forgiveness therapy or discussion* or self-evaluation or self evaluation or problem solving or problem-solving or breathing control or exposure therapy or flashback* or cognitive therapy or cognitive behavioural therapy or cognitive behavioral therapy or empowerment or skill building or skill-building or assertive* or crisis intervention or problem solving or psychoeducation or psycho-education or grief resolution or case management or relationship safety or self-esteem or self esteem or information or safety planning or stress management or loss or grief or empowerment or crisis-intervention or perinatal home-visiting or wallet-size card* or community resources or life skills or home social support).mp. or (perpetrator adj4 (treatment or programme* or program*)).ti,ab. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]

7 counseling/

8 exp psychotherapy/

9 6 or 7 or 8

10 5 and 9

Search Name: IPV COCHRANE Intervention

Last Saved: 26/02/2019 10:52:11

- | ID | Search |
|-----|--|
| #1 | MeSH descriptor: [Domestic Violence] this term only |
| #2 | MeSH descriptor: [Spouse Abuse] this term only |
| #3 | MeSH descriptor: [Intimate Partner Violence] this term only |
| #4 | MeSH descriptor: [Battered Women] this term only |
| #5 | (domestic or partner or spouse or spousal):ti,kw,ab |
| #6 | (violence or abuse):ti,kw,ab |
| #7 | #5 and #6 |
| #8 | (intimate partner violence or battered wife or battered husband* or battered wives):ti,kw,ab |
| #9 | (counselling or counseling or psychological therapy or psychotherapy or advocacy or social support or behaviour checklist* or behavior checklist* or refuge or shelter or brief intervention or outreach or safety behaviour* or safety behavior* or shelter* or treatment programme* or treatment program* or support group* or story-telling or storytelling or reminiscence or expressive writing or forgiveness therapy or discussion* or self-evaluation or self evaluation or problem solving or problem-solving or breathing control or exposure therapy or flashback* or cognitive therapy or cognitive behavioural therapy or cognitive behavioral therapy or empowerment or skill building or skill-building or assertive* or crisis intervention or problem solving or psychoeducation or psycho-education or grief resolution or case management or relationship safety or self-esteem or self esteem or information or safety planning or stress management or loss or grief or empowerment or crisis-intervention or perinatal home-visiting or wallet-size card* or community resources or life skills or home social support):ti,kw,ab |
| #10 | (perpetrator NEAR/4 treatment or programme* or program*):ti,ab,kw |
| #11 | MeSH descriptor: [Counseling] this term only |
| #12 | MeSH descriptor: [Psychotherapy] explode all trees |
| #13 | #1 or #2 or #3 or #4 or #7 or #8 |
| #14 | #9 or #10 or #11 or #12 |
| #15 | #13 and #14 |

Results were imported into EndNote and de-duplicated.

* Ayiku L, Levay P, Hudson T, Craven J, Barrett E, Finnegan A and Adams R. The MEDLINE UK filter: development and validation of a geographic search filter to retrieve research about the UK from OVID MEDLINE. Health Information and Libraries Journal, 2017 34: 200-216.

Appendix 2 — Included and excluded studies

PRISMA flowchart

Figure one summarises the volume of publications included and excluded at each stage of the review. 34 publications were ultimately judged to be relevant to one or more review questions and were considered for extraction. Publications that were included or excluded after the review of full-text articles are detailed below.

Publications included after review of full-text articles

The 36 publications included after review of full-texts are summarised in Table 10. Studies were prioritised for extraction and data synthesis. It was planned *a priori* that the following approach would be taken to prioritise studies for extraction:

6. Systematic reviews and meta-analyses would be considered the highest quality of evidence if any were found. However, we did not find any systematic review that met our inclusion criteria (included studies conducted in the UK, USA, Australia, Ireland and New Zealand). Following this, study designs would be prioritised for each question in the order listed in appendix 3. All studies were prioritised if they considered a UK population, followed by studies from Western populations analogous to the UK. We limited our criteria to only include studies published in the UK, USA, Australia, Ireland and New Zealand) as we believed that there were similarities in the language as well as the health care system of these countries and therefore the findings of such studies would be of relevance to UK population. The only exception was studies related to prevalence of IPV in the UK. For this question studies only conducted in the UK were included.

Figure 1. Summary of publications included and excluded at each stage of the review

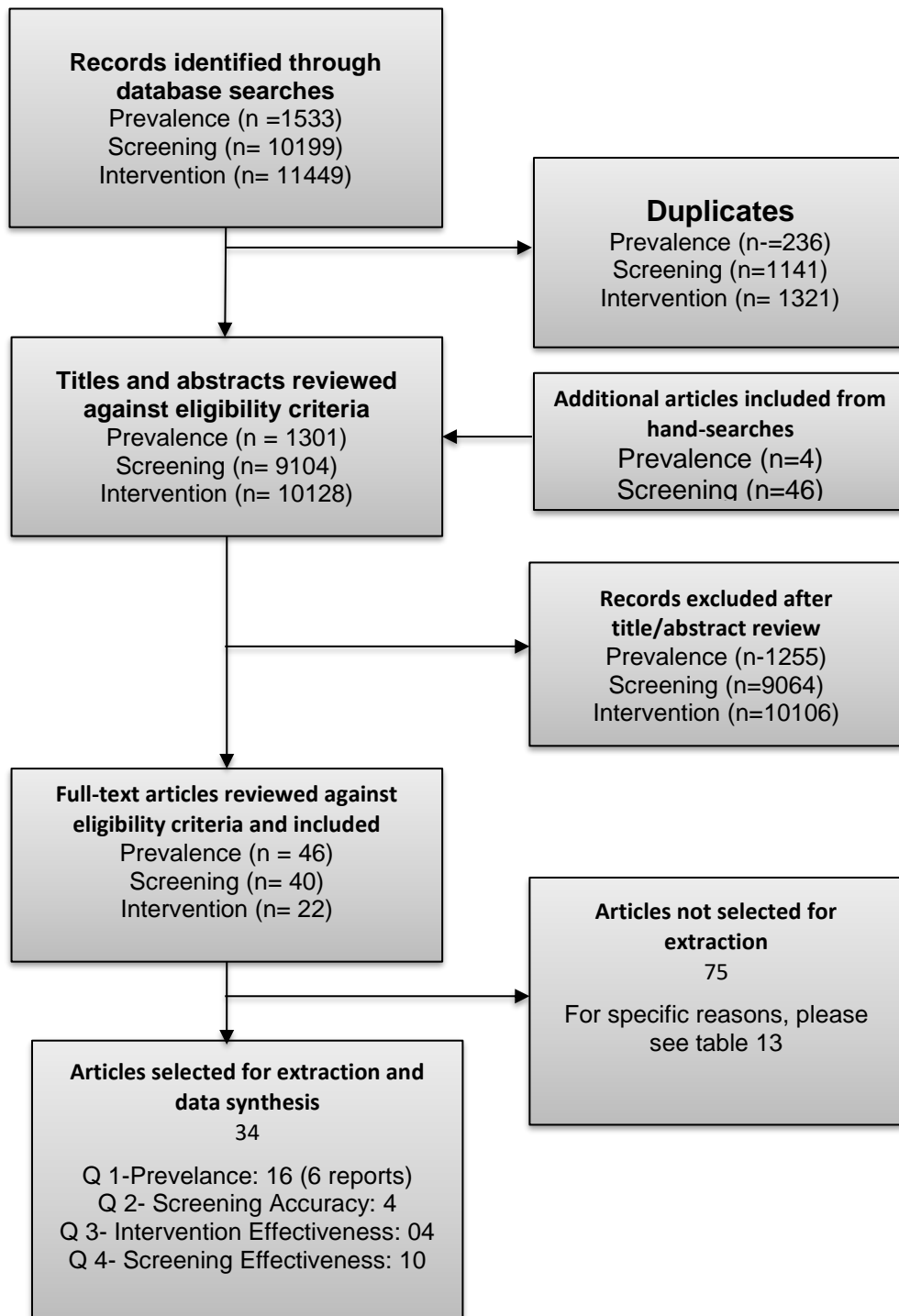


Table 12. Summary of publications included after review of full-text articles, and the question(s) each publication was identified as being relevant to review questions

	Study	Prevalence	Screening Accuracy	Screening Effectiveness	Intervention Effectiveness
1	Bacchus et al., 2017 ⁵	✓			
2	Chan et al., 2008 ⁷⁵		✓		
3	Coker et al., (2012) ⁷⁸				✓
4	Costa et al., 2015 ⁶¹	✓			
5	Dhairawan et al., 2013 ⁴	✓			
6	Dubowitz et al., 2008 ⁷⁶		✓		
7	El-Mohandes et al., 2008 ⁷⁹				✓
8	Guasp 2012 ⁵⁹	✓			
9	Gillum et al., 2009 ⁸⁴				✓
10	Gravningen et al., 2017 ⁶²	✓			
11	Hegarty et al., 2013 ⁸				✓
12	Hester et al., 2015 ⁶	✓			
13	Hunt & Fish 2008 ⁶⁰	✓			
14	Iverson et al., 2013 ⁷⁷		✓		
15	Johnson et al., 2007 ⁶⁹	✓			
16	Jonas et al., 2014 ⁶³	✓			
17	Khalifeh et al., 2013 ⁶⁴	✓			
18	Khalifeh et al., 2013a ⁶⁵	✓			
19	Khalifeh et al., 2015 ⁶⁸	✓			
20	Kiely et al., 2010 ⁸⁰				✓
21	Klevens et al., 2015 ⁹⁰			✓	
22	Klevens et al., 2012 ⁸⁸			✓	
23	Klevens et al., 2012 ⁸⁹			✓	
24	Klevens et al., 2015 ⁹¹			✓	
25	Miller et al., 2016 ⁸⁵				✓
26	Motta et al., 2015 ⁷⁴	✓			
27	Saftlas et al., 2014 ⁸²				✓
28	Sanmani et al., 2013 ⁷³	✓			

29	Sharps et al., 2016 ⁸¹		✓
30	Sohal et al., 2007 ⁷	✓	
31	Taft et al., 2011 ⁸⁶		✓
32	Warren-Gash, et al., 2016 ⁷⁰	✓	
33	Wokoma et al., 2014 ³	✓	
34	Zlotnick et al., 2018		✓

Publications excluded after review of full-text articles

Q1. Prevalence: 47 publications related to IPV prevalence (excluding six national reports) received full-text review; 16 were included in the review. The remaining 31, along with the reasons for exclusion, are listed in Table 13.

Q2. Screening Accuracy. 40 publications related to screening accuracy received full-text review; 4 were included in the review (plus 4 included for Q4). The remaining 32, along with the reasons for exclusion, are listed in Table 13.

Q3. Intervention Effectiveness. 22 publications related to intervention effectiveness received full-text review; 10 were included in the review. The remaining 12, along with the reasons for exclusion, are listed in Table 13.

Q4. Screening Effectiveness. 40 publications related to screening effectiveness received full-text review; 4 were judged relevant to the review (plus 4 for Q2). The remaining 32 publications, along with the reasons for exclusion, are listed in Table 13.

Table 13. Publications excluded after review of full-text articles – reduce number of reasons

Reference	Reason for exclusion
Q1. What is the prevalence of partner violence in the UK in women and men?	
1. Brewer G, Roy M, Smith Y. Domestic violence: The psychosocial impact and perceived health problems. <i>Journal of Aggression, Conflict and Peace Research</i> . 2010;2(2):4-15.	Not prevalence related
2. Coid J, Hu J, Kallis C, Ping Y, Zhang J, Hu Y, et al. A cross-national comparison of violence among young men in China and the UK: Psychiatric and cultural explanations. <i>Social Psychiatry and Psychiatric Epidemiology</i> . 2017;52(10):1267-79.	Perpetrator related
3. Cooper C, Selwood A, Blanchard M, Walker Z, Blizzard R, Livingston G. Abuse of people with dementia by family carers: representative cross sectional survey. <i>BMJ</i> 2009; 338: b155	Not IPV; perpetrator related
4. Cooper, C., Selwood, A., Blanchard, M., Walker, Z., Blizzard, R., & Livingston, G. (2010). The determinants of family carers' abusive behaviour to people with dementia: Results of the CARD study. <i>Journal of Affective Disorders</i> , 121, 136–142.	Not IPV perpetrator related
5. Devaney J, Spratt T. Child abuse as a complex and wicked problem: Reflecting on policy developments in the United Kingdom in working with children and families with multiple problems. <i>Children and Youth Services Review</i> . 2009;31(6):635-41.	Not prevalence related
6. Devries, K., Mak, J., Garcia-Moreno, C., Petzold, M., Child, J. et al. The Global Prevalence of Intimate Partner Violence Against Women. <i>Science</i> . 2013;340:1527-28.	UK data not separable
7. Fisher HL, Schreier A, Zammit S, Maughan B, Munafo MR, Lewis G, et al. Pathways between childhood victimization and psychosis-like symptoms in the ALSPAC birth cohort. <i>Schizophr Bull</i> . 2013;39(5):1045-55.	Not prevalence related
8. Flach C, Leese M, Heron J, Evans J, Feder G, Sharp D, et al. Antenatal domestic violence, maternal mental health and subsequent child behaviour: a cohort study. <i>Bjog</i> . 2011;118(11):1383-91.	Not prevalence related
9. Forbes KM, Lomax N, Cunningham L, Hardie J, Noble H, Sarner L, et al. Partner notification in pregnant women with HIV: findings from three inner-city clinics. <i>HIV Med</i> . 2008;9(6):433-5.	Not prevalence related
10. Gonzalez RA, Kallis C, Coid JW. Adult attention deficit hyperactivity disorder and violence in the population of England: does comorbidity matter? <i>PLoS ONE</i> . 2013;8(9):e75575.	Not prevalence related
11. Gregory MJ, Milroy CM. Homicide and suicide in Yorkshire and the Humber: 1975-1992 and 1993-2007. <i>Am J Forensic Med Pathol</i> . 2010;31(1):58-63.	Not prevalence related

12.	Hart CL, Hole DJ, Lawlor DA, Smith GD, Lever TF. Effect of conjugal bereavement on mortality of the bereaved spouse in participants of the Renfrew/Paisley Study. <i>J Epidemiol Community Health</i> . 2007;61(5):455-60.	Not prevalence related
13.	Hearn J, McKie L. Gendered and social hierarchies in problem representation and policy processes: "domestic violence" in Finland and Scotland. <i>Violence Against Women</i> . 2010;16(2):136-58.	Not prevalence related
14.	Hester M, Donovan C. Researching domestic violence in same-sex relationships--a feminist epistemological approach to survey development. <i>J</i> . 2009;13(2):161-73.	
15.	Hughes K, Bellis MA, Whelan G, Calafat A, Juan M, Blay N. Alcohol, drugs, sex and violence: health risks and consequences in young British holidaymakers to the Balearics. <i>Adicciones</i> . 2009;21(4):265-77.	Not prevalence related
16.	Hurley R. Bringing healthcare to the UK's abused domestic workers. <i>Bmj</i> . 2016;352:i502.	Not prevalence related
17.	Irving L, Liu BC. Beaten Into Submissiveness? An Investigation Into the Protective Strategies Used by Survivors of Domestic Abuse. <i>J Interpersonal Violence</i> . 2016;886260516682520.	Not prevalence related
18.	Jackson-Hollis V, Joseph S, Browne K. The impact of extrafamilial victimization and poly-victimization on the psychological well-being of English young people. <i>Child Abuse Negl</i> . 2017;67:349-61.	Not prevalence related
19.	Jaffee SR, Bowes L, Ouellet-Morin I, Fisher HL, Moffitt TE, Merrick MT, et al. Safe, stable, nurturing relationships break the intergenerational cycle of abuse: a prospective nationally representative cohort of children in the United Kingdom. <i>J Adolesc Health</i> . 2013;53(4 Suppl):S4-10.	Not prevalence related
20.	Kekana LP, Hall M, Motta S, Bewley S. Should violence services be integrated within abortion care? A UK situation analysis. <i>Reprod Health Matters</i> . 2016;24(47):104-17.	Not prevalence related
21.	Kidd SH, Hughes NS, Crichton JH. Kitchen knives and homicide: a systematic study of people charged with murder in the Lothian and Borders region of Scotland. <i>Med Sci Law</i> . 2014;54(3):167-73.	Not prevalence related
22.	Kilday A-M. "Sugar and spice and all things nice?": Violence against parents in Scotland, 1700-1850. <i>Journal of Family History</i> . 2016;41(3):318-35.	Not prevalence related
23.	Loke W, Bacchus L, Torres C, Fox E. Domestic violence in a genitourinary medicine setting-An anonymous prevalence study in women. <i>Int J STD AIDS</i> . 2008;19(11):747-51.	Not prevalence related
24.	Malpass A, Sales K, Feder G. Reducing symbolic-violence in the research encounter: collaborating with a survivor of domestic abuse in a qualitative study in UK primary care. <i>Sociol Health Illn</i> . 2016;38(3):442-58.	Not prevalence related
25.	Myhill A. Measuring coercive control: what can we learn from national population surveys? <i>Violence Against Women</i> . 2015;21(3):355-75.	Not prevalence related
26.	Oram S, Abas M, Bick D, Boyle A, French R, Jakobowitz S, et al. Human Trafficking and Health: A Survey of Male and Female Survivors in England. <i>Am J Public Health</i> . 2016;106(6):1073-8.	Not prevalence related
27.	Parameshwaran V, Cockbain BC, Hillyard M, Price JR. Is the Lack of Specific Lesbian, Gay, Bisexual, Transgender and Queer/Questioning (LGBTQ) Health Care Education in Medical School a Cause for Concern? Evidence From a Survey of Knowledge and Practice Among UK Medical Students. <i>J Homosex</i> . 2017;64(3):367-81.	Not prevalence related

28.	Patel N, Bailey E, Mahdmina A, Lomax A, Coulthard P. Domestic violence education for UK and Ireland undergraduate dental students: a five-year perspective. <i>J Dent Educ.</i> 2014;78(8):1162-6.	Not prevalence related
29.	Platt L, Grenfell P, Bonell C, Creighton S, Wellings K, Parry J, et al. Risk of sexually transmitted infections and violence among indoor-working female sex workers in London: the effect of migration from Eastern Europe. <i>Sex Transm Infect.</i> 2011;87(5):377-84.	Not prevalence related
30.	Ramsay J, Rutterford C, Gregory A, Dunne D, Eldridge S, Sharp D, et al. Domestic violence: knowledge, attitudes, and clinical practice of selected UK primary healthcare clinicians. <i>Br J Gen Practice</i> 2012;62(602):e647-55.	Not prevalence related
31.	Robinson AL, Howarth E. Judging risk: key determinants in British domestic violence cases. <i>J Interpers Violence.</i> 2012;27(8):1489-518.	Not prevalence related
Q2. How accurate are partner violence screening tools in UK women and men? AND Q4 What is the reported effectiveness of partner violence screening for men and women in a healthcare setting?		
1.	Brignone L, Gomez AM. Double jeopardy: Predictors of elevated lethality risk among intimate partner violence victims seen in emergency departments. <i>Prev Med (Baltim).</i> 2017;103:20-25.	High Risk Setting
2.	Chang JC, Dado D, Schussler S, Hawker L, Holland CL, Burke JG, Cluss PA. In person versus computer screening for intimate partner violence among pregnant patients. <i>Patient education and counseling.</i> 2012; 88(3):443-	No relevant reference standard
3.	Chen, P. H., Rovi, S., Washington, J., Jacobs, A., Vega, M., Pan, K. Y., & Johnson, M. S. Randomized comparison of 3 methods to screen for domestic violence in family practice. <i>The Annals of Family Medicine;</i> 2007; 5(5), 430-435.	No relevant reference standard
4.	Choo EK, Nicolaidis C, Jenkinson RH, Cox JM, McConnell KJ. Failure of intimate partner violence screening among patients with substance use disorders. <i>Acad Emerg Med.</i> 2010;17(8):886-889.	Does not relate to the question; No relevant outcome reported
5.	Coker AL, Flerx VC, Smith PH, Whitaker DJ, Fadden MK, Williams M. Partner violence screening in rural health care clinics. <i>Am J Public Health.</i> 2007;97(7):1319-25.	No relevant reference standard
6.	Colarossi LG, Breitbart V, Betancourt GS. Screening for intimate partner violence in reproductive health centres: An evaluation study. <i>Women & health.</i> 2010;50(4):313-326	No relevant index standard
7.	Datner EM, Wiebe DJ, Brensinger CM, Nelson DB. Identifying pregnant women experiencing domestic violence in an urban emergency department. <i>Journal of Interpersonal Violence.</i> 2007; 22(1):124-35.	High Risk Setting
8.	Fincher D, VanderEnde K, Colbert K, Houry D, Smith LS, Yount KM. Effect of face-to-face interview versus computer-assisted self-interview on disclosure of intimate partner violence among African American women in Women Infant Children. <i>Journal of interpersonal violence.</i> 2015; 30(5):818-38.	No relevant reference standard

9.	Frazier T, Yount KM. Intimate partner violence screening and the comparative effects of screening mode on disclosure of sensitive health behaviours and exposures in clinical settings. <i>Public health</i> . 2017;143:52-9.	No relevant reference standard
10.	Gerlach LB, Datner EM, Hollander JE, Zogby KE, Robey JL, Wiebe DJ. Does sex matter? Effect of screener sex in intimate partner violence screening. <i>Am J Emerg Med</i> . 2007;25(9):1047-1050.	High Risk Setting
11.	Gilbert L, Shaw SA, Goddard-Eckrich D, et al. Project WINGS (Women Initiating New Goals of Safety): A randomised controlled trial of a screening, brief intervention and referral to treatment (SBIRT) service to identify and address intimate partner violence victimisation among substance-using women re. <i>Crim Behav Ment Heal</i> . 2015;25(4):314-329.	Not health care setting
12.	Hamby S. Self-report measures that do not produce gender parity in intimate partner violence: A multi-study investigation. <i>Psychol Violence</i> . 2016;6(2):323-335.	Not health care setting
13.	Hewitt L, Bhavsar P, Phelan H. The secrets women keep: Intimate partner violence screening in the female trauma patient. <i>J Trauma Acute Care Surg</i> . 2011;70(2):320-323.	High Risk Setting
14.	Houry D, Kaslow NJ, Kemball RS, et al. Does screening in the emergency department hurt or help victims of intimate partner violence? <i>Ann Emerg Med</i> . 2008;51(4):433-442, 442.e1-7.	High Risk Setting
15.	Hunter T, Botfield JR, Estoesta J, Markham P, Robertson S, McGeechan K. Experience of domestic violence routine screening in Family Planning NSW clinics. <i>Sex Health</i> . 2017;14(2):155-163.	Not health care setting
16.	Iverson KM, King MW, Gerber MR, et al. Accuracy of an intimate partner violence screening tool for female VHA patients: a replication and extension. <i>J Trauma Stress</i> . 2015;28(1):79-82.	Not health care setting
17.	Iverson KM, Sorrentino AE, Bellamy SL, et al. Adoption, penetration, and effectiveness of a secondary risk screener for intimate partner violence: Evidence to inform screening practices in integrated care settings. <i>Gen Hosp Psychiatry</i> . 2018;51:79-84.	Does not relate to the question; No relevant outcome reported
18.	Jaeger JR, Spielman D, Cronholm PF, Applebaum S, Holmes WC. Screening male primary care patients for intimate partner violence perpetration. <i>J Gen Intern Med</i> . 2008;23(8):1152-1156.	Perpetrator study: does not relate to the question
19.	Kiely M, Gantz MG, El-Khorazaty MN, El-Mohandes AA. Sequential screening for psychosocial and behavioural risk during pregnancy in a population of urban African Americans. <i>BJOG An Int J Obstet Gynaecol</i> . 2013;120(11):1395-1402.	Does not relate to the question; No relevant outcome reported
20.	Kim YJ, Montano NP. Validity of Single Question for Screening Intimate Partner Violence among Urban Latina Women. <i>Public Health Nurs</i> . 2017;34(6):569-575.	High risk area
21.	Klevens J, Sadowski L, Kee R, Trick W, Garcia D. Comparison of screening and referral strategies for exposure to partner violence. <i>Women's health issues</i> . 2012 22(1):e45-52.	No relevant reference standard

22.	Koziol-McLain J, Giddings L, Rameka M, Fyfe E. Intimate partner violence screening and brief intervention: experiences of women in two New Zealand Health Care Settings. <i>J Midwifery Womens Health</i> . 2008;53(6):504-510.	Does not relate to the question; No relevant outcome reported
23.	Koziol-McLain J, Garrett N, Fanslow J, et al. A randomized controlled trial of a brief emergency department intimate partner violence screening intervention. <i>Ann Emerg Med</i> . 2010;56(4):413-423.e1.	High Risk Setting
24.	Macmillan HL, Wathen CN, Jamieson E, et al. Screening for Intimate Partner Violence in Health Care Settings. 2009;302(5).	High Risk Setting; data included and indivisible
25.	Perciaccante VJ, Susarla SM, Dodson TB. Validation of a diagnostic protocol used to identify intimate partner violence in the emergency department setting. <i>J Oral Maxillofac Surg</i> . 2010;68(7):1537-1542.	High Risk Setting
26.	Power C, Bahnisch L, McCarthy D. Social work in the emergency department-Implementation of a domestic and family violence screening program. <i>Aust Soc Work</i> . 2011;64(4):537-554.	High Risk Setting
27.	Spangaro JM, Zwi AB, Poulos RG, Man WYN. Six months after routine screening for intimate partner violence: Attitude change, useful and adverse effects. <i>Women Heal</i> . 2010;50(2):125-143.	High Risk Setting
28.	Sprague S, Madden K, Dosanjh S, Petrisor B, Schemitsch EH, Bhandari M. Screening for intimate partner violence in orthopedic patients: A comparison of three screening tools. <i>J Interpers Violence</i> . 2012;27(5):881-898.	High Risk Setting
29.	Trautman DE, McCarthy ML, Miller N, Campbell JC, Kelen GD. Intimate partner violence and emergency department screening: computerized screening versus usual care. <i>Ann Emerg Med</i> . 2007;49(4):526-534.	High Risk Setting
30.	Warren-Gash C, Bartley A, Bayly J, et al. Outcomes of domestic violence screening at an acute London trust: are there missed opportunities for intervention? <i>BMJ Open</i> . 2016;6(1):e009069.	High Risk Setting
31.	Wathen CN, Jamieson E, MacMillan HL, McMaster Violence Against Women Research G. Who is identified by screening for intimate partner violence? <i>Womens Heal Issues</i> . 2008;18(6):423-432.	High Risk Setting data included and indivisible
32.	Zink T, Levin L, Putnam F, Beckstrom A. Accuracy of five domestic violence screening questions with nongraphic language. <i>Clinical pediatrics</i> . 2007 Mar;46(2):127-34.	No relevant index standard
Q3. What is the reported effectiveness of interventions after partner violence is disclosed by men and women?		
1.	Becker KD, Mathis G, Mueller CW, Issari K, Atta SS, Okado I. Barriers to treatment in an ethnically diverse sample of families enrolled in a community-based domestic violence intervention. <i>Journal of Aggression, Maltreatment & Trauma</i> . 2012 Nov 1;21(8):829-50.	Not relevant to topic

2.	Berke DS, Macdonald A, Poole GM, Portnoy GA, McSheffrey S, Creech SK, Taft CT. Optimizing trauma-informed intervention for intimate partner violence in veterans: The role of alexithymia. <i>Behaviour research and therapy</i> . 2017 Oct 1;97:222-9.	Not relevant to topic
3.	Bloom TL, Glass NE, Case J, Wright C, Nolte K, Parsons L. Feasibility of an online safety planning intervention for rural and urban pregnant abused women. <i>Nursing research</i> . 2014 Jul 1;63(4):243-51.	Not relevant setting
4.	Karatzias T, Ferguson S, Gullone A, Cosgrove K. Group psychotherapy for female adult survivors of interpersonal psychological trauma: a preliminary study in Scotland. <i>Journal of Mental Health</i> . 2016;25(6):512-9.	No comparison group
5.	Kaslow NJ, Leiner AS, Reviere S, Jackson E, Bethea K, Bhaju J, Rhodes M, Gantt MJ, Senter H, Thompson MP. Suicidal, abused African American women's response to a culturally informed intervention. <i>Journal of consulting and clinical psychology</i> . 2010;78(4):449.	Not relevant setting
6.	Koziol-McLain J, Vandal AC, Wilson D, Nada-Raja S, Dobbs T, McLean C, Sisk R, Eden KB, Glass NE. Efficacy of a web-based safety decision aid for women experiencing intimate partner violence: randomized controlled trial. <i>Journal of medical internet research</i> . 2018;20(1):e8.	Not relevant setting
7.	Kendall J, Pelucio MT, Casaletto J, Thompson KP, Barnes S, Pettit E, Aldrich M. Impact of emergency department intimate partner violence intervention. <i>Journal of Interpersonal Violence</i> . 2009;24(2):280-306.	High Risk Setting
8.	Prosman GJ, Lo Fo Wong SH, Lagro-Janssen AL. Support by trained mentor mothers for abused women: a promising intervention in primary care. <i>Family practice</i> . 2013;31(1):71-80.	Ineligible study design
9.	Rhodes KV, Rodgers M, Sommers M, Hanlon A, Chittams J, Doyle A, Datner E, Crits-Christoph P. Brief motivational intervention for intimate partner violence and heavy drinking in the emergency department: a randomized clinical trial. <i>Jama</i> . 2015;314(5):466-77.	High Risk Setting
10.	Stevens J, Scribano PV, Marshall J, Nadkarni R, Hayes J, Kelleher KJ. A trial of telephone support services to prevent further intimate partner violence. <i>Violence against women</i> . 2015;21(12):1528-47.	High Risk Setting
11.	Taft CT, Creech SK, Gallagher MW, Macdonald A, Murphy CM, Monson CM. Strength at Home Couples program to prevent military partner violence: A randomized controlled trial. <i>Journal of consulting and clinical psychology</i> . 2016;84(11):935.	Not relevant setting
12.	Taha F, Zhang H, Snead K, Jones AD, Blackmon B, Bryant RJ, Siegelman AE, Kaslow NJ. Effects of a culturally informed intervention on abused, suicidal African American women. <i>Cultural diversity and ethnic minority psychology</i> . 2015;21(4):560.	Setting not clear

Appendix 3 — Summary and appraisal of individual studies

Data Extraction: Studies relevant to criterion 1

Table 14. Summary of the Quality Appraisal of Prevalence using Axis Tool

Question	Bacchus	Costa	Dhairyawar	Gravningen	Guasp	Hester	Hunt & Fish	Johnson	Jonas	Khalifeh	Khalifeh	Khalifeh	Motta	Sanmani	Warren-Gash	Wokoma
1 Were the aims/objectives of the study clear?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2 Was the study design appropriate for the stated aim(s)?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3 Was the sample size justified?	No	Yes	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	No	No	No	No
4 Was the target/reference population clearly defined? (Is it clear who the research was about?)	Yes	Yes	Yes	Yes	NO	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5 Was the sample frame taken from an appropriate population base so that it closely represented the target/reference population under investigation?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
6 Was the selection process likely to select subjects/participants that	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes

	were representative of the target/reference population under investigation?																	
7	Were measures undertaken to address and categorise Non-responders?	No	No	No	No	No	No	No	Yes	Yes	NA	NA	NA	No	No	No	No	
8	Were the risk factor and outcome variables measured appropriate to the aims of the study?	NA	Yes	Yes	Yes	NA	Yes	NA	Yes	Yes	NA	NA	NA	Yes	Yes	No	Yes	
9	Were the risk factor and outcome variables measured correctly using instruments/measurements that had been trialled, piloted or published previously?	NA	Yes	Yes	Yes	NA	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	
10	Is it clear what was used to determined statistical significance and/or precision estimates? (e.g. p-values, confidence intervals)	Yes	Yes	Yes	Yes	NA	Yes	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA	NA	Yes
11	Were the methods (including statistical methods) sufficiently described to enable them to be repeated?	Yes	Yes	Yes	Yes		DK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12	Were the basic data adequately described?	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
13	Does the response rate raise concerns about Non-response bias?	Yes	Yes	No	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	
14	If appropriate, was information about Non-responders described?	No	Yes	No	NA	No	No	No	Yes	Yes	Yes	Yes	Yes	No	No	No	No	

15	Were the results internally consistent?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
16	Were the results presented for all the analyses described in the methods?	Yes	Yes	Yes	Yes	No	DK	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
17	Were the authors' discussions and conclusions justified by the results?	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
18	Were the limitations of the study discussed?	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
19	Were there any funding sources or conflicts of interest that may affect the authors' interpretation of the results?	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
20	Was ethical approval or consent of participants attained?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	No	No	No	Yes	Yes	Yes	Yes
		Fair	Fair	Fair	Good	Poor	Poor		Poor	Good	Good	Good	Good	Poor	Fair	Fair	Poor

Table 15. Bacchus et al., 2017

Study Reference	Bacchus, L J, Buller, A M, Ferrari, G, Peters, T J, Devries, K, Sethi, G, White, J, Hester, M, Feder, G S. Occurrence and impact of domestic violence and abuse in gay and bisexual men: A cross sectional survey. <i>International Journal of STD & AIDS</i> . 2017;28(1):16-27.
Study Design	Clinical population: Cross-sectional survey.
Population	532 Gay men attending a sexual health clinic in London
Definition of IPV	Negative behaviours experienced as an adult from a current or former intimate partner included: ever felt frightened of the behaviour of a partner; ever needed to ask a partner's permission to work, go shopping, visit relatives or visit friends (beyond being considerate to and checking with a partner); ever been slapped, hit, kicked or otherwise physically hurt; and ever forced to have sex or made to engage in any sexual activity against one's will. Not carried out or experienced negative behaviour (n=321): White 82.6; Mixed 5.0; Asian/British 3.2; Black/British 4.4; Chinese/other 4.7. Experienced negative behaviour only (n=118) (%): White 77.8; Mixed 7.7; Asian/British 2.6; Black/British 6.8; Chinese/other 5.1: Carried out negative behaviour (n=25) White 76; Mixed 4; Asian/British 4; Black/British 8; Chinese/other 8: Both experienced and carried out (n=58): White 76.8; Mixed 7.1; Asian/British 5.4; Black/British 7.1; Chinese/other 3.6. Note small numbers in the "carried out" and "carried out and experienced" group - wide CIs.
IPV any time	Of 532 men, 33.9% (95% CI: 29.4-37.9) experienced and 16.3% (95% CI: 13.0-19.8) reported carrying out negative behaviour. By ethnicity. Not carried out or experienced negative behaviour (n=321): White 82.6%; Mixed 5.0%; Asian/British 3.2%; Black/British 4.4%; Chinese/other 4.7%. Experienced negative behaviour only (n=118): White 77.8%; Mixed 7.7%; Asian/British 2.6%; Black/British 6.8%; Chinese/other 5.1%: Carried out negative behaviour (n=25) White 76%; Mixed 4%; Asian/British 4%; Black/British 8%; Chinese/other 8%: Both experienced and carried out (n=58): White 76.8%; Mixed 7.1%; Asian/British 5.4%; Black/British 7.1%; Chinese/other 3.6%. Note small numbers in the "carried out" and "carried out and experienced" group - wide CIs.
IPV previous 12 months	Data unclear
Quality Appraisal	AXIS - Fair

Table 16. Costa et al., 2015

Study Reference	Costa D, Soares J, Lindert J, Hatzidimitriadou E, Sundin O, Toth O, et al. Intimate partner violence: A study in men and women from six European countries. <i>Int J Public Health</i> . 2015;60(4):467-78.
Study Design	General population: Survey,
Population	3496 participants across six European cities, one of which is London. London figures not specified or analysed as a sub - group.

Definition of IPV	Based on CTS-2
IPV any time	ND
IPV previous 12 months	Women: Psychological aggression 39.7; Sexual coercion 14.2; Physical assault 8.5; Injury 3.6: Men Psychological aggression 34.3; Sexual coercion 12.4; Physical assault 7.9; Injury 3.7: These are the figures for "severe" acts based on risk of injury that would require medical attention - derived from Straus et al 2003 [Straus MA, Hamby SL, Warren WL (2003) The conflict tactics scales handbook. Revised conflict tactics scales (CTS2). CTS: parent child version (CTSPC). Western Psychological Services, Los Angeles]
Quality Appraisal	AXIS - Fair

Table 17. Dhairyawan, et al., 2013

Study Reference	Dhairyawan R, Tariq S, Scourse R et al. Intimate partner violence in women living with HIV attending an inner city clinic in the UK: prevalence and associated factors. <i>HIV Med</i> 2013; 14: 303–310.
Study Design	Cross sectional survey
Population	CLINICAL: 191 Women attending an HIV clinic, London
Definition of IPV	HARK plus added questions for lifetime prevalence
IPV any time	52% (44.7-59.0). The most common form of IPV experienced by women was humiliation/emotional abuse (45%) followed by feeling afraid of a partner (33%), physical abuse (33%) and then rape/sexual abuse (20%) By ethnicity: Unusual categorisation of ethnicity: self-report as African-born black; other black (i.e. Black born outside sub-Saharan Africa); White; other (including Asian). In multivariable analysis women of other Black ethnicity were more likely to have experienced lifetime IPV (AOR 4.64, CI 1.06 - 20.11; p < 0.05)
IPV previous 12 months	14.1% (9.1-19.1) and 14.1% (9.1-19.1) during pregnancy.
Quality Appraisal	AXIS - Fair

Table 18. Gravningen et al., 2017

Study Reference	Gravningen K, Mitchell KR, Wellings K, Johnson AM, Geary R, Jones KG, et al. Reported reasons for breakdown of marriage and cohabitation in Britain: Findings from the third National Survey of Sexual Attitudes and Lifestyles (Natsal-3). <i>PLoS ONE</i> . 2017;12 (3): e0174129.
Study Design	GENERAL population: Computer assisted interviews Survey:

Population	1960 - 706 men, 1254 women taking part in the British National Survey of Sexual Attitudes and Lifestyles who reported a recent relationship breakdown.
Definition of IPV	DV not defined - just given as a reason for the breakdown
IPV any time	ND
IPV previous 12 months	16% women; 4% men cited DV as a reason for relationship breakdown
Additional points	
Quality Appraisal	AXIS - Good

Table 19. Guasp, 2012

Study Reference	Guasp A. Gay and Bisexual Men's Health Survey. United Kingdom: Stonewall; 2012.
Study Design	Cross sectional Survey
Population	A survey involving 6,861 gay and bisexual men from across Britain about their health needs; Gay- 92%; Bisexual- 8%; Lived in England (85%), Scotland (9%) and Wales (6%); White (95%); Black or minority ethnic community (5%); Aged 20 or younger (8%) and over 50 (15%). Age range: 16- 85.
Definition of IPV	DV not defined - just given as a reason for the breakdown
IPV any time	50% gay and bisexual men have experienced at least one incident of abuse from a family member or partner since the age of 16 compared to 17 per cent of men in general population. More than a third of gay and bisexual men have experienced at least one incident of domestic abuse in a relationship with a man; 25% of gay and bisexual men have experienced domestic abuse from a family member, for example mother or father, since the age of 16
IPV previous 12 months	
Quality Appraisal	AXIS - Fair

Table 20. Hester et al., 2015

Study Reference	Hester M, Ferrari G, Jones SK, Williamson E, Bacchus LJ, Peters TJ, et al. Occurrence and impact of negative behaviour, including domestic violence and abuse, in men attending UK primary care health clinics: a cross-sectional survey. BMJ Open. 2015;5 (5): e007141.
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Study Design	Cross-sectional questionnaire-based study
Population	CLINICAL population: Survey of men attending 16 general practices in the south west of England: 1403 of eligible patients (58%) participated in the survey and 1368 (56%) completed the questions relevant to this paper. 97% of respondents reported they were heterosexual.
Definition of IPV	Negative behaviours experienced as an adult from a current or former intimate partner included: ever felt frightened of the behaviour of a partner; ever needed to ask a partner's permission to work, go shopping, visit relatives or visit friends (beyond being considerate to and checking with a partner); ever been slapped, hit, kicked or otherwise physically hurt; and ever forced to have sex or made to engage in any sexual activity against one's will.
IPV any time	ND
IPV previous 12 months	One hundred and two respondents (7.6%, 95% CI 6.2% to 9.1%) reported experiencing any negative behaviours in the past 12 months. Fifty-eight of 1283 male respondents (4.5%, 95% CI 3.5% to 5.8%) reported perpetrating any negative behaviours in the past 12 months.
Quality Appraisal	AXIS – Poor

Table 21. Hunt & Fish., 2008

Study Reference	Hunt R, Fish J. Prescription for change: lesbian and bisexual women's health check United Kingdom: Stonewall; 2008.
Study Design	Cross sectional Survey
Population	A survey involving 6,178 lesbian and bisexual women from across Britain about their health needs; Lesbian 81%; Bisexual- 16%; Lived in England (85%), Scotland (9%) and Wales (5%); White (82%); Black or minority ethnic community (16%); Age range: 14- 84; Physical or mental disability 14%.
Definition of IPV	DV not defined - just given as a reason for the breakdown
IPV any time	25% of lesbian and bisexual women have experienced domestic violence; In two thirds of cases, the perpetrator was another woman. 80% have not reported incidents of domestic violence to the police and of those that did, only half were happy with their response.
IPV previous 12 months	
Quality Appraisal	AXIS - Fair

Table 22. Johnson, et al., 2007

Study Reference	Johnson JK, John R, Humera A, Kukreja S, Found M, Lindow SW. The prevalence of emotional abuse in gynaecology patients and its association with gynaecological symptoms. Eur J Obstet Gynecol Reprod Biol. 2007;133(1):95-9.
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Study Design	Self-completed questionnaire survey
Population	CLINICAL population: 825 Women attending a gynaecology clinic in North England
Definition of IPV	Modified version of AAS
IPV any time	24% (198/825): Less common in women over 50.
IPV previous 12 months	ND
Quality Appraisal	AXIS - Poor

Table 23. Jonas, et al., 2014

Study Reference	Jonas S, Khalifeh H, Bebbington PE, McManus S, Brugha T, Meltzer H, et al. Gender differences in intimate partner violence and psychiatric disorders in England: results from the 2007 adult psychiatric morbidity survey. Epidemiol Psychiatr Sci. 2014;23(2):189-99.
Study Design	Survey Self-completed questionnaire plus F2F interview, but the latter was not addressing prevalence
Population	GENERAL population – 7047 (could not find sex breakdown) taken from the survey: Adult Psychiatric Morbidity Study – England
Definition of IPV	Same as British Crime Survey (Elkin 2018)
IPV any time	23.4 (22.2-24.5: n=1822) of which 17.4% (16.4-18.4) physical and 5.9 (5.4-6.5) emotional. WOMEN 27.8 (26.2-29.4): MEN 18.7 (17.1-20.4) of which physical WOMEN 22.0 (20.7-23.6): MEN 12 (11.2-13.8) and emotional WOMEN 6.3 (5.4-7.2): MEN 5.6 (4.0-6.5).
IPV previous 12 months	5.9 (5.0-6.2)
Additional points	The study also examined the association between psychiatric disorder with IPV. In Women, Physical IPV significantly associated with Common Mental Disorders, eating disorders and PTSD; Men and Women it was significantly associated with substance and alcohol disorders.
Quality Appraisal	AXIS – Good

Table 24. Khalifeh et al., 2013

Study Reference	Khalifeh H, Hargreaves J, Howard LM, Birdthistle I. Intimate partner violence and socioeconomic deprivation in England: Findings from a national cross-sectional survey. Am J Public Health. 2013;103(3):462-72.
Study Design	Cross-sectional survey
Population	GENERAL population: Disabled respondents to British Crime Survey, England and Wales: 1256 with mental illness; 7781 with non-mental disability
Definition of IPV	From Crime Survey:
IPV any time	Domestic violence was reported by a higher proportion of disabled over non-disabled victims of violence (44% v 31% p≤0. 01) Figures were: No disability 226/35361 (9% of violence victims) – Odds Ratio [adjusted for age and sex] = 1; Non-mental disability 43/7781 (14% of violence victims) OR = 2.7 (1.8-4.2); Mental illness 43/1256 (22% of violence victims) OR = 5.2 (3.4-7.8)
IPV previous 12 months	ND
Additional points	
Quality Appraisal	AXIS - Good

Table 25. Khalifeh, 2013 a

Study Reference	Khalifeh H, Howard LM, Osborn D, Moran P, Johnson S. Violence against people with disability in England and Wales: findings from a national cross-sectional survey. PLoS ONE. 2013;8(2):e55952.
Study Design	Cross-sectional survey
Population	GENERAL population: taken from BCS – England (not Wales): sample size 21226: F 11503 (54.2%); M 9723 (45.8)
Definition of IPV	As BCS
IPV any time	As BCS
IPV previous 12 months	AS BCS
Additional points	In women, any lifetime IPV and physical IPV were associated with educational attainment, housing tenure, household income, social class, and multiple area deprivation, but not crime area deprivation. When we compared the most- and least-deprived categories, the strongest associations were found between physical IPV and (1) housing tenure (AOR = 2.3; 95% CI = 2.0, 2.7; for social renters compared with owners) and (2) household income (AOR = 2.2; 95% CI = 1.8, 2.7; for the bottom vs top income quintiles). Lifetime emotional-only IPV was not associated with any deprivation factors (Table 5). In MEN and after adjustment

	<p>for confounders, any lifetime IPV and emotional-only IPV were associated with social housing tenure only (Tables 3 and 5, respectively). Physical IPV was not associated with any deprivation factors (Table 4).</p> <p>For those with missing household income values, the prevalence of any IPV and its subtypes was lower than that found in the highest income households in both sexes (Tables 3-5). For all positive associations between social deprivation and IPV, the strength of the association did not vary by age group, except for a stronger association between low household income and IPV in younger compared with older women.</p>
Quality Appraisal	AXIS - Good

Table 26. Khalifeh et al., 2015A

Study Reference	Khalifeh 2015. Khalifeh H, Oram S, Trevillion K, Johnson S, Howard LM. Recent intimate partner violence among people with chronic mental illness: findings from a national cross-sectional survey. Br J Psychiatry. 2015;207(3):207-12.
Study Design	Cross-sectional survey – British Crime Survey
Population	GENERAL People with chronic mental illness responding to the British Crime Survey: 23222 of which 692 had CMI. Of the 692, Female 61%, Male 39%.
Definition of IPV	As BCS
IPV any time	ND
IPV previous 12 months	The adjusted OR for any IPV among people with CMI was 2.9 (CI = 2.1–3.8), with a trend for higher relative odds among women (OR = 3.3, CI = 2.4–4.7) than men (OR = 2.0, CI = 1.1–3.7). Among women with CMI, the adjusted relative odds for emotional, physical and sexual IPV were 2.8 (CI = 1.9–4.0), 2.6 (CI = 1.6–4.3) and 5.4 (CI = 2.4–11.9), respectively. Among men with CMI, the adjusted relative odds for emotional and physical IPV were 2.0 (1.0–4.4) and 3.0 (1.2–7.5), respectively. The absolute number of men with CMI reporting sexual IPV was too small for stable estimates.
Additional points	
Quality Appraisal	AXIS - Good

Table 27. Motta, et al., 2015

Study Reference	Motta S, Penn-Kekana L, Bewley S. Domestic violence in a UK abortion clinic: anonymous cross-sectional prevalence survey. J Fam Plann Reprod Health Care. 2015;41(2):128-33.
Study Design	Questionnaire survey
Population	CLINICAL: 190/383 questionnaires returned; Women seeking termination of pregnancy; One UK abortion clinic
Definition of IPV	AAS
IPV any time	16%
IPV previous 12 months	Physical 11% - sexual 4%. Prevalence of DV in current pregnancy 4% Ethnicity: No significant association with ethnicity.
Additional points	
Quality Appraisal	AXIS - Poor

Table 28. Sanmani et al., 2013

Study Reference	Sanmani L, Sheppard Z, Chapman C. Factors associated with the anonymous reporting of lifetime domestic violence in a genitourinary medicine clinic: A patient self-reported questionnaire study. Int J STD AIDS. 2013;24(5):401-7.
Study Design	Self-completed questionnaire survey
Population	CLINICAL: 476 Attenders at GUM clinic, Bournemouth, England
Definition of IPV	AAS
IPV any time	98/472 21%: 12%M 29%F. Emotional 19.3%; physical 16.2; financial 6.1; sexual 5.7. By ethnicity: Sample White, 93.7% v Other 6.3: OR for reporting domestic violence White = 1.0: Another 0.7 (0.2-2.6) p=0.56
IPV previous 12 months	50/476 (106%); 3.9M: 16.9F.
Additional points	
Quality Appraisal	AXIS - Poor

Table 29. Warren-Gash et al., 2016

Study Reference	Warren-Gash C, Bartley A, Bayly J, Dutey-Magni P, Edwards S, Madge S, et al. Outcomes of domestic violence screening at an acute London trust: are there missed opportunities for intervention? BMJ Open. 2016;6 (1): e009069.
Study Design	Cross sectional survey
Population	CLINICAL: patients screened for domestic violence in community gynaecology, genitourinary medicine (GUM) and HIV medicine clinics between 1 October 2013 and 30 June 2014, London: 10158: Community gynaecology clinics = 517; HIV = 316; GUM = 9324. F=5834 (57.4%)
Definition of IPV	Idiomatic questionnaire - Multidisciplinary staff were trained to ask the following standardized question: “Have you ever been emotionally or physically hurt by your partner, ex-partner or family member?” Those who answered positively were assessed for current or past IPV by asking, “Are you still in contact with this person and are they still causing you and your family issues?”
IPV any time	ND
IPV previous 12 months	7.1% across all clinics: GUM 5.7; Gynae 19; HIV 29.4. F9.5: M 3.8. By ethnicity: Number and % of persons screening positive in 1) Community gynaecology: White 55 (19.9%), Asian 5 (11.4%), Black 19 (29.2%) Mixed/other 11 (22.4%), NK 8 (9.6%). 2) HIV White 49 (31.2%), Asian or Black 31 (27%), Mixed/other 8 (29.6%), NK 5 (29.4%). 3) GUM White 347 (5.4%), Asian 32 (4.5%), Black 65 (5.6%), Mixed/other/unknown 83 (8.2%)
Additional points	
Quality Appraisal	AXIS - Fair

Table 30. Wokoma, et al., 2014

Study Reference	Wokoma TT, Jampala M, Bexhell H, Guthrie K, Lindow S. A comparative study of the prevalence of domestic violence in women requesting a termination of pregnancy and those attending the antenatal clinic. Bjog. 2014;121(5):627-33.
Study Design	A Cross-sectional comparative prevalence study using self-administered questionnaires, with women selected as opportunistic samples over a concurrent period
Population	CLINICAL: Pregnant women in the first trimester attending TOP clinic or ANC clinic, NE England 507: 233 ANC, 274 TOP.
Definition of IPV	AAS
IPV any time	
IPV previous 12 months	In the current relationship: TOP population, 5.8%, ANC 0.9%; Chi-squared = 10.2 (2); P < 0.05 By ethnicity: No significant association with ethnicity.
Additional points	
Quality Appraisal	AXIS - Poor

OFFICIAL STATISTICAL RELEASES

Table 31. Domestic abuse police statistics, England and Wales

Study Reference	ENGLAND: Domestic abuse in England and Wales: year ending March 2018. ONS. URL www.ons.gov.uk
Study Design	Audit – incidents of domestic abuse recorded by police in England and Wales
Population	GENERAL – England and Wales
Definition of IPV	“Any incident or pattern of incidents of controlling ² , coercive ³ , threatening behaviour, violence or abuse between those aged 16 or over who are, or have been, intimate partners or family members regardless of gender or sexuality. It can encompass, but is not limited to, the following types of abuse: psychological, physical, sexual, financial, emotional”. Note that this is Domestic Violence and therefore broader than IPV.
IPV any time	
IPV previous 12 months	1,198,094 domestic abuse-related incidents and crimes ⁴ recorded by the police in England and Wales in the year ending March 2018. Of these, 598,545 (50%) were incidents not subsequently recorded as a crime. Of those that were, the types were: Violence against the person 32.9%, Sexual offences 13.6%, Miscellaneous 11.0, Public order 7.5, Criminal damage and arson 8.4. Twenty -eight forces provided data on sex of victims: The ratios here were all weighted towards women, e.g., sexual offences 95.7%, and violence against the person 74.6%. By ethnicity: Adults aged 16-59 who were victims of partner abuse in the last year: White 87.8%, Mixed/multiple 2.0%; Asian/Asian British 6.5%; Black/African/Caribbean/Black British 3.1%; Other 0.7%. Cases discussed at multi-agency risk assessment conferences (MARACs) n=88461 BME 16.9%. [In 2011 Census, 86% population was White].
Additional points	
Quality Appraisal	Police statistics

Table 32. Crime Survey of England and Wales

Study Reference	Elkin, M. Domestic abuse: findings from the Crime Survey for England and Wales: year ending March 2018. 2018. Office for National Statistics. URL: www.ons.gov.uk.
Study Design	GENERAL population: Interviewer questionnaire survey

Population	50,000 are approached to take part in the survey. The web site says that in earlier years, around 75% have responded. The figures here are taken from that population, presumably around 12,000 although I couldn't find precise figure. Age 16-59 for the data here.
Definition of IPV	<p>The report concerns Domestic abuse rather than IPV so includes family members who may not be intimate partners. The figures usually also include "partner abuse" which probably correlates closest to IPV.</p> <ul style="list-style-type: none"> • non-sexual abuse by a partner: physical force, emotional or financial abuse, or threats to hurt the respondent or someone close to them, carried out by a current or former partner • non-sexual abuse by a family member: physical force, emotional or financial abuse, or threats to hurt the respondent or someone close to them, carried out by a family member other than a partner (father or mother, step-father or mother or other relative) • sexual assault carried out by a partner or other family member: rape or assault by penetration (including attempts), or indecent exposure or unwanted touching carried out by a current or former partner or other family member • stalking carried out by a partner or other family member: two or more incidents (causing distress, fear or alarm) of receiving obscene or threatening unwanted letters, emails, text messages or phone calls, having had obscene or threatening information about them placed on the internet, waiting or loitering around home or workplace, or following or watching by a current or former partner or family member
IPV any time	<p>Any domestic abuse: 21% Partner abuse: non-sexual 15.3% sexual 3.5%. Partner stalking: 6.4%</p>
IPV previous 12 months	<p>Any domestic abuse: 6.1% [M 4.2, F 7.9] ; Partner abuse: non-sexual 4.0% [F 5.64; M 2.44]: sexual 0.2% [F 0.36, M 0.08] Partner stalking: 0.9% [F 1.4, M 0.5]; Types of abuse experienced: Non-physical (emotional, financial) M 57, F 72.5; Threats M 28.7, F 37.8; Force M 45.7, F 28.0; Sexual assault by rape or penetration M 0.5, F 3.8; Indecent exposure or unwanted sexual touching M 2.2, F 4.2; Stalking M 18.1, F 23.4</p>
Additional points	There are additional breakdown figures for domestic abuse in the last year by age & sex, marital status & sex, long term illness or disability, household structure, household income. Figure 5 shows the prevalence reducing over time since March 2005.
Quality Appraisal	AXIS - Good

Table 33. Police statistics from Scotland

Study Reference	SCOTLAND: Domestic abuse recorded by the police in Scotland: 2017-2018. Scottish Government. URL: www.gov.scot/
Study Design	Audit – incidents of domestic abuse recorded by police in Scotland
Population	GENERAL - Scotland
Definition of IPV	Many potential crimes: common assault 37%; breach of the peace 31%; non-sexual violence 2%; sexual offences 3%
IPV any time	
IPV previous 12 months	12 110 incidents per 10,000 (1.1%) population 2017-18: Victims F 159 per 10K, M 37 per 10K: Rate fairly stable over 10 years
Additional points	
Quality Appraisal	Police statistics – Tables link

Table 34. Scottish Crime and Justice Survey

Study Reference	Murray K. 2014/15 Scottish Crime and Justice Survey: Partner abuse. 2016. National Statistics. URL: https://www.gov.scot/publications/scottish-crime-justice-survey-2014-15-partner-abuse/pages/2/
Study Design	Survey – face-to-face interviews
Population	GENERAL: 11500 face-to-face interviews with adults 16+ in private households
Definition of IPV	The SCJS definition of partner abuse is consistent with the definition adopted by the police in recording domestic abuse: 'any form of physical, non-physical or sexual abuse, which takes place within the context of a close relationship, committed either in the home or elsewhere. This relationship will be between partners (married, co-habiting or otherwise) or ex-partners.'
IPV any time	14.1% F18.5, M9.2
IPV previous 12 months	2.9% F3.4, M2.4
Additional points	
Quality Appraisal	AXIS - Good

Table 35. Police Report from Northern Ireland

Study Reference	Domestic Abuse Incidents and Crimes Recorded by the Police in Northern Ireland Update to 30 September 2018. PSNI. URL www.psnipolice.uk
Study Design	Police statistics
Population	Northern Ireland
Definition of IPV	The PSNI has adopted the definition of domestic violence and abuse as outlined in the 2016 Northern Ireland Government Strategy ‘Stopping Domestic and Sexual Violence and Abuse in Northern Ireland’ as: ‘threatening, controlling, coercive behaviour, violence or abuse (psychological, virtual, physical, verbal, sexual, financial or emotional) inflicted on anyone (irrespective of age, ethnicity, religion, gender, gender identity, sexual orientation or any form of disability) by a current or former intimate partner or family member’. The following will assist in the application of this definition: (a) ‘Incident’ means an incident anywhere and not confined to the home of one of the partners/family members; (b) ‘Family members’ include mother, father, son, daughter, brother, sister, grandparents, whether directly or indirectly related, in-laws or Stepfamily. (c) ‘Intimate partners’ means there must have been a relationship with a degree of continuity and stability. The relationship must also have had (or reasonably supposed to have had) a sexual aspect, such as in the relationship between husband and wife or between others generally recognised as a couple including same sex couples.
IPV any time	
IPV previous 12 months	17 domestic abuse incidents per 1000 population; 8 domestic abuse crimes per 1000 population. Victims F 68%: M 32%.
Additional points	
Quality Appraisal	

Table 36. Northern Ireland Crime Surveys

Study Reference	Campbell, P and Rice, A. Experience of Domestic Violence: Findings from the 2011/12 to 2015/16 Northern Ireland Crime Surveys 2017. Department of Justice, NI. URL www.justice-ni.gov.uk
Study Design	Face-to-face survey
Population	GENERAL: Northern Ireland

Definition of IPV	<p>Partner abuse:</p> <p>1 NON-PHYSICAL ABUSE (denied access to a fair share of household money; stopped from seeing friends and relatives; having property deliberately damaged; or constantly belittled to the point of feeling worthless);</p> <p>2 THREATS (frightened by threats to hurt the individual or someone close); and</p> <p>3 FORCE (pushed, held, pinned or slapped; kicked, bitten or hit; choked or strangled; threatened with a weapon; death threats; forced to have sex or take part in sexual activity; use of a weapon; or use of other forces).</p>
IPV any time	<p>NICS 2015/16 estimate that 12.1% of people aged 16-64 have experienced at least one form of domestic violence, by a partner, since age 16, with women (15.1%) displaying a higher prevalence rate than men (8.4%). NICS 2015/16 results also estimate that around one-in-twenty-five adults (4.3%) experienced at least one form of partner violence and abuse within the last three years, a similar proportion to that observed in both NICS 2013/14 (5.2%) and 2014/15 (5.0%). At 5.9% in NICS 2015/16, women were over twice as likely as men (2.5%) to have been victims of domestic violence, by a partner, in the last three years, a gender difference that is reflected across each of the three separate offence groups examined: non-physical abuse (4.4% v 2.4%); threats (2.0% v 0.2%); and force (2.5% v 0.9%).</p>
IPV previous 12 months	<p>2015-16: Any partner abuse, 1.8%: F2.5: M0.9</p>
Additional points	
Quality Appraisal	

Data Extraction: Studies relevant to criterion 4

Table 37. CASP Quality Assessment of Studies related to Diagnostic Accuracy

Questions	Chan et al	Dubowitz	Iverson	Sohal
1 Was there a clear question for the study to address?	Yes	Yes	Yes	Yes
2 Was there a comparison with an appropriate reference standard?	No – reference was Non-validated	Yes	Yes	Yes
3 Did all patients get the diagnostic test and reference standard?	Yes	Yes	Yes	Yes
4 Could the results of the test have been influenced by the results of the reference standard?	No	No	No	No
5 Is the disease status of the tested population clearly described?	Yes	Yes	Yes	Yes
6 Were the methods for performing the test described in sufficient detail?	Yes	Yes	Yes	Yes
7 What are the results?	See Table 7 of	See Table 7	See Table 7	See Table 7
8 How sure are we about the results? Consequences and cost of alternatives performed?	Too small to be sure.	High rate of missing data	Confident – good quality study	Fairly confident –fair to good quality study
9 Can the results be applied to your patients/the population of interest?	No – early stage of tool development for gay population – sample size <50	Population is USA and poor – so cannot be directly applied – but sample size adequate >50	Population is USA female veterans – so cannot be directly applied – adequate sample size > 50	Yes – UK population; adequate sample size > 50
10 Can the test be applied to your patient or population of interest?	No	Not without further testing	Not without further testing	Yes
11 Were all outcomes important to the individual or population considered?	Yes	Yes	Yes	Yes
12 What would be the impact of using this test on your patients/population?	Insufficient data	Further testing needed	Further testing needed	Report states further research needed

Table 38. Chan and Cavacuiti 2008

Study Reference	Chan, E., & Cavacuiti, C. Gay abuse screening protocol (GASP): Screening for abuse in gay male relationships. <i>Journal of homosexuality</i> , 2008; 54 (4), 423-438.																							
Study Design	Quantitative; Cross sectional																							
Study Objectives	To pilot the application of the WAST to gay males in a family practice setting; To determine both patients' and family physicians' level of comfort with the use of the WAST during the typical clinical encounter. WAST was renamed as GASP to appropriately reflect the patient population																							
Inclusion	Physicians and patients from 410 health centres in Toronto; English-speaking gay male, older than 18 years; involved in a gay relationship for at least 6 months; unaccompanied to the appointment; and had to consider the attending physician their primary care physician.																							
Exclusions	Not Given																							
Population	32 Gay Male: mean age 40.2 (range 24-65).																							
Intervention	GASP (Gay Abuse Screening Protocol), an eight-item questionnaire adapted from WAST – patients were classified as abused if they answered “sometimes” or “often” to three of the GASP questions inquiring specifically about emotional, physical or sexual abuse.																							
Comparator	The authors note that at the time of the study there were no studies that tested an abuse-screening tool with gay males. However, patients were classified as abused if they answered “sometimes” or “often” to three of the GASP questions inquiring specifically about emotional, physical or sexual abuse. This classification was taken as the standard against which the other items in GASP and the GASP overall was tested.																							
Outcomes	<p>The primary outcome was patients' and family physicians' comfort with using GASP in a typical encounter. However, there is also some initial pilot attempt to validate GASP.</p> <p>10/32 (31.3%) were classified as abused. A GASP screen was deemed positive if patients answered “A lot of tension” or “great difficulty” to two initial screening questions about the relationship. This was used as the basis for the following calculations:</p> <table border="1" data-bbox="375 1029 1898 1190"> <thead> <tr> <th colspan="2" rowspan="2"></th> <th colspan="2">Presence of abuse</th> <th rowspan="2"></th> </tr> <tr> <th>Abused</th> <th>Non-abused</th> </tr> </thead> <tbody> <tr> <th rowspan="2">GASP Screen</th> <th>Positive</th> <td>4</td> <td>1</td> <td>5</td> </tr> <tr> <th>Negative</th> <td>6</td> <td>21</td> <td>27</td> </tr> <tr> <td colspan="2"></td> <td>10</td> <td>22</td> <td>32</td> </tr> </tbody> </table> <p>This gives sensitivity 40% (4/10), specificity 95.5% (21/22), PPV 80% (4/5), NPV 77.8% 21/27.</p> <p>Turning to the main outcomes of the study: Mean comfort score was high (Likert >4) for both patients (4.16 ± 0.18) and physicians (4.71 ± 0.18). Mean comfort scores were significantly lower for abused patients (3.26 ± 0.75) than non-abused patients (4.57 ± 0.26). Patients were comfortable (Likert >3) with 76.2% of GASP items while physicians were comfortable with all GASP items.</p>					Presence of abuse			Abused	Non-abused	GASP Screen	Positive	4	1	5	Negative	6	21	27			10	22	32
		Presence of abuse																						
		Abused	Non-abused																					
GASP Screen	Positive	4	1	5																				
	Negative	6	21	27																				
		10	22	32																				

Quality Appraisal	<p>The study was assessed using CASP checklist; Assessed as having:</p> <p>Appropriate – statement of aims, methodology, research design, recruitment, explanation of researcher/participant relationship, data analysis, ethics and statement of findings</p> <p>Insufficient detail – data collection</p> <p>Limitations: Data analysis process, not clearly described; exclusion criteria not mentioned; small sample size; Further study required regarding validity; Study setting served a large population of gay males and has gay physicians as staff. As gay physicians and gay male patients may be more comfortable and experienced dealing with and discussing gay issues; this also may have resulted in a degree of selection bias among the study sample. The classification of abuse may be limited that it only includes those abused patients who are willing (and able) to disclose their abuse. The GASP did not elicit a timeframe for when the abuse occurred, therefore affecting the specificity and sensitivity of the tool.</p>
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Table 39. Dubowitz et al., 2008

Study Reference	Dubowitz H, Prescott L, Feigelman S, Lane W, Kim J. Screening for intimate partner violence in a pediatric primary care clinic. <i>Pediatrics</i> . 2008 Jan 1;121(1):e85-91.
Study Design	Quantitative; Quasi Experimental
Study Objectives	To estimate the prevalence of IPV among parents at a paediatric primary care clinic and to evaluate the stability, sensitivity, specificity, positive and negative predictive values, and likelihood ratios of a very brief screen for IPV
Inclusion	English-speaking adult caregivers with a child <6 years seen for a well-child visit
Exclusions	Non completing the protocol within 2 months or not answering all questions on the CTS-2 (excluded from analysis)
Population	200 parents (94% mothers) in a paediatric clinic, median age 25 years, 92% black, 93% Medicaid 26% _high school education
Intervention	Parent Screening Questionnaire (PSQ): Three questions embedded in a parent questionnaire: (1) Have you ever been in a relationship in which you were threatened or physically hurt by your partner? (2) In the past year, have you been afraid of a partner? (3) In the past year, have you thought of getting a court order for protection?
Comparator	CTS-2
Outcomes	<p>Identification of partner violence; A total of 12.0% of the mothers answered “yes” to at least one of the screening questions. Each of the three IPV questions embedded in the PSQ were analysed separately to see to what extent they correlated with three elements of the CTS-2: physical assault ever, injury ever, and psychological aggression. Where there was any single one of the three IPV questions answered as ‘yes’ the comparison with CTS-2 was as follows:</p> <ul style="list-style-type: none"> • physical assault ever: sensitivity 19%, specificity 93%, PPV 63%, NPV 63%, Likelihood ration positive (LR+) 2.5, LR negative 0.88; • injury ever: sensitivity 29%, specificity 91%, PPV 38%, NPV 87%; LR+ 3.3, LR- 0.78 • psychological aggression: sensitivity 27%, specificity 92%, PPV 46%, NPV 83%, LR+ 3.3, LR-.079 <p>In addition, one question (physically hurt or threatened) had scores that were close to all three together, offering, the authors say, the possibility of a quick, single-question screen. They acknowledge the low sensitivity, but balance this against ease of</p>

	administration and its probable effectiveness versus no intervention at all.
Quality Appraisal	The study was assessed using CASP checklist; as having: Appropriate – statement of aims, methodology, research design, recruitment, explanation of researcher/participant relationship, data collection, data analysis, ethics and statement of findings. Additional points: Findings related to the control group were not made available; families in the study came from disadvantaged backgrounds where poverty and violence may be common; the terms ‘afraid’ or ‘hurt’ could have different meanings; risk of selection bias; large amount of missing data; high attrition rate.

Table 40. Iverson et al 2013

Study Reference	Iverson KM, King MW, Resick PA, Gerber MR, Kimerling R, Vogt D. Clinical utility of an intimate partner violence screening tool for female VHA patients. <i>Journal of general internal medicine.</i> 2013;28(10):1288-93.
Study Design	Cross sectional mail survey; validity study
Study Objectives	To investigate the accuracy of the HITS as a predictor of past-year IPV among a sample of Veterans Health Administration (VHA) patients, using the Conflict Tactics Scale-Revised (CTS-2) as the reference standard; to evaluate the accuracy of the HITS in detecting past-year sexual IPV.
Inclusion	Female Veterans 18 years and older in an intimate relationship in past year
Exclusions	Women who completed only one or neither of the IPV instruments (and were excluded from the study sample) did not differ from included women on any of the sample characteristics described below (all p-values > 0.05). There were no other exclusion criteria.
Population	160 Female veterans registered with the Veteran Health Administration (VHA).
Intervention	HITS
Comparator	CTS-2
Outcomes	Validity of HITS; The percentage of women who reported past-year IPV, as measured by any physical assault, sexual coercion, and/or severe psychological aggression on the CTS-2, was 28.8 %. The receiver-operator characteristic curve demonstrated that the HITS cutoff score of 6 maximizes the true positives while minimizing the false positives in this sample. The sensitivity of the optimal HITS cutoff score of 6 was 78 % (95 % CI 64 % to 88 %), specificity 80 % (95 % CI 71 % to 87 %), positive likelihood ratio 3.9 (95 % CI 2.61 to 5.76), negative likelihood ratio 0.27 (95 % CI 0.16 to 0.47), positive predictive value 0.61 (95 % CI 0.47, 0.73), and negative predictive value 0.90 (95 % CI 0.82, 0.95).
Quality Appraisal	The study was assessed using CASP checklist; as having: Appropriate – statement of aims, methodology, research design, recruitment, explanation of researcher/participant relationship, data collection, data analysis and statement of findings; insufficient information on ethics and data analysis. Additional Points: This study involved a mail survey. HITS was not assessed in a clinical setting; should be compared in the clinical setting and compare self-report methods (e.g., paper and pencil, computers, tablets) to clinician-administered questioning. Only female VHA patients in study setting; limited generalizability.

Table 41. Sohal 2007

Study	Sohal H, Eldridge S, Feder G. The sensitivity and specificity of four questions (HARK) to identify intimate partner
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Reference	violence: a diagnostic accuracy study in general practice. BMC family practice. 2007;(1):49.
Study Design	Quantitative; Cross-sectional survey of women in 12 GP waiting rooms
Study Objectives	We estimated the sensitivity and specificity of four questions (HARK) developed from the Abuse Assessment screen, compared to a 30-item abuse questionnaire, the Composite Abuse Scale (CAS)
Inclusion	Women aged more than 17 years who in the last year had been in an intimate relationship
Exclusions	Women accompanied by children over four years of age or by another adult, were too unwell to complete the questionnaires, unable to understand English or unable to give informed consent
Population	429 women approached, 232 responses, 60% non-White
Intervention	HARK
Comparator	CAS
Outcomes	Prevalence using CAS score ≥ 3 was 23%. HARK – using optimal cut off score of ≥ 1 - was sensitivity 81% (CI 69-90) specificity 95% (CI 91-98), PPV 83% (CI 70-91), NPV 94% (90-97).
Quality Appraisal	The study was assessed using CASP checklist; as having: Appropriate – statement of aims, methodology, research design, recruitment, explanation of researcher/participant relationship, data collection, data analysis, ethics and statement of findings. Other points: 54% response rate

Data Extraction: Studies relevant to criterion 9

Table 42. CASP Quality Assessment of Studies related to Intervention Effectiveness

Question	Coker	EI-Mohandes PLUS Kiely	Gillum	Hegarty	Miller	Saftlas	Sharps	Taft	Zlotnick
01 Did the trial address a clearly focused issue?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
02 Was the assignment of patients to treatments randomised?	Cluster RCT	Yes – but high rate of refusal so risk of selection bias	Yes	Yes	Yes	Yes	Cluster RCT	Cluster RCT	Yes
03 Were all of the patients who entered the trial properly accounted for at its conclusion?	Yes	Yes	Yes	Yes	High attrition accounted for via imputation.	High attrition – but no significant differential attrition	High attrition not fully accounted	High rate of attrition and missing data	Attrition rate unclear
04 Were patients, health workers and study personnel 'blind' to treatment?	No	No – although some missing information re assessors	No	Partial, of data assessors	No	No	No	No	No – although some missing information re assessors
05 Were the groups similar at the start of the trial	Yes	Yes	Yes	Mostly – some differences in marriage and children	Mostly	Yes	Yes	Yes (from additional data in SR by Rivas et al)	Mostly

06	Aside from the experimental intervention, were the groups treated equally?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
07	How large was the treatment effect?	See Table 8	See Table 8	See Table 8	See Table 8	See Table 8	See Table 8	See Table 8	See Table 8	See Table 8
08	How precise was the estimate of the treatment effect?	See Table 8	See Table 8	See Table 8	See Table 8	See Table 8	See Table 8	See Table 8	See Table 8	See Table 8
09	Can the results be applied to the local population, or in your context?	Not directly. USA. Majority Non-white.	Not directly. USA. Exclusively African American	Not directly. USA. Poor (uninsured) Majority Non-white	Not directly. Australia – few details of population.	Not directly. USA. Young population. Majority White.	Not directly. USA rural.	Not directly. USA. Majority non-White.	Not directly. Australia. Relatively deprived group.	Not directly. USA. Mainly non-White.
10	Were all clinically important outcomes considered?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
11	Are the benefits worth the harms and costs?	See Report	See Report Fair	See Report	See Report Fair	See Report Fair	See Report Fair	See Report Fair	See Report	See Report Fair

Table 43. Coker et al., 2012

Publication	Coker AL, Smith PH, Whitaker DJ, Le B, Crawford TN, Flerx VC. Effect of an in-clinic IPV advocate intervention to increase help seeking, reduce violence, and improve well-being. Violence Against Women. 2012;18(1):118-31.
Study Details	Quantitative: Quasi Experimental
Study Objectives	To evaluate the efficacy of having an IPV advocate in the clinic for immediate consult following a positive IPV assessment compared to the usual practice of referring women to an external IPV advocacy agency.
Inclusion	Clinics: located in the referral range of the coalition, (b) provided primary care to lower-income women, (c) had a patient volume of at least 1,000 women/ year, and (d) were willing to participate. Women: age 18 or older, in an intimate relationship in the past 5 years, and mentally competent to provide consent.
Exclusions	Women accompanied by others during their clinic visit who did not leave the room
Population	231 Women Attention Primary Care
Intervention	In clinic advocacy provided by an advocate (n=138)
Comparator	Usual care (n= 93). IPV+ women were given the business card of their health care provider with the coalition hotline number.
Outcomes	Help seeking behaviour; depressive symptoms; medical care visits; self-perceived physical and mental wellbeing; Among the screened women who had experienced IPV in the past 5 years, 429 (46%) agreed to follow-up contact. Within this group, 76% or 327 completed the baseline interview and 231 (70.6%) completed at least one follow-up interview. Of women who completed at least one follow-up. Women attending clinics in the intervention arm were significantly older. The two groups did not differ significantly in terms of race, education, marital status, number of children, number in the household, or the proportion currently experiencing IPV (all p values > .05). Interview after the baseline interview (n = 231), 75% completed a 6-month interview, 60% completed a 12-month interview, 50% completed an 18-month interview, and 30% completed a 24-month interview. Women in the intervention arm reported talking with an advocate in their clinic (32.8%), relative to women in the usual care arm (4.4%). Women in the intervention arm were significantly more likely to use services provided by the advocate (p =.003), and this increased use was most likely to occur (p <.05) First 6 months. Women in the intervention are being more likely to report involving police, lawyer, or court systems to receive protective orders (legal/law enforcement help seeking). Women in intervention arm did not differ from those in usual care clinics in any other help-seeking domain. 33% of IPV+ women in the intervention arm reported talking with an advocate on their first screening visit; only 14% of women talk with an advocate on a subsequent visit over follow-up. IPV scores (DAS, WEB) were highest during the first interview and declined over time. IPV scores in the advocate intervention clinics trended toward greater decline over time relative to usual care (i.e., Intervention x Time interaction for DAS scores, F = 2.02, p =.07 within the first 6 months of the intervention and among those women experiencing current IPV at baseline (p <. 05). No differences were observed in either self-perceived current mental health or interference of mental health on daily activities between the intervention and the usual care arms. Scores for depressive symptoms and suicidal ideation were significantly lower over time for IPV+ women in the intervention clinics relative to the usual care arms. No differences in self-perceived physical health, interference, or physical pain were noted between intervention and usual care clinics over time. Adjusted mean number of medical care visits were lower over time among intervention clinics relative to the usual care visits, these differences were not statistically significant.

Quality Appraisal	Limitations: Smaller sample size; selection; less than 50% response rate; no randomisation;;
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Table 44. El-Mohandes et al., 2008

Publication	El-Mohandes AA, Kiely M, Joseph JG, Subramanian S, Johnson AA, Blake SM, Gantz MG, El-Khorazaty MN. An intervention to improve postpartum outcomes in African-American mothers: a randomized controlled trial. <i>Obstetrics and Gynecology</i>. 2008;112(3):611-20.
Study Details	Quantitative; RCT
Study Objectives	To evaluate the efficacy of an integrated multiple risk intervention, delivered mainly during pregnancy, in reducing such risks (cigarette smoking, environmental tobacco smoke exposure, depression, and IPV) postpartum.
Inclusion	18 years of age, self-identified as belonging to an ethnic minority, less than 29 weeks of gestation, English speaking, a Washington, DC resident, and acknowledged at least one of the four targeted risks (smoking' depression; IPV; ETSE (environmental tobacco smoke exposure)
Exclusions	Not mentioned
Population	750 women (350 in intervention group and 373 in usual care group)
Intervention	Individual in-person CBT aimed at reducing behavioural risks (depression, IPV, smoking, and tobacco exposure); sessions targeted toward specific risks reported by women in that session; IPV components emphasized safety behaviours; IPV intervention: emphasised safety behaviours, provided information about types of abuse and the cycle of violence, provided a Danger Assessment component to assess risks, and prevention options to be considered by women (e.g. filing a protection order), as well as the development of a safety plan. A list of community resources were also provided to women. Behavioural counselling for other risks (depression, smoking, tobacco exposure) in intervention group but not control group
Comparator	N: 461; usual care
Outcomes	CTS; The intervention was effective in significantly reducing the number of risks reported in the postpartum period. In bivariate analyses, the intervention group was more successful in resolving all risks (47% compared with 35%, P.007, number needed to treat ⁹ , 95% confidence interval [CI] 5–31) and in resolving some risks (63% compared with 54%, P.009, number needed to treat ¹¹ , 95% CI 7–43) as compared with the usual care group. In logistic regression analyses, women in the intervention group were more likely to resolve all risks (odds ratio 1.86, 95% CI 1.25–2.75, number needed to treat=7, 95% CI 4 –19) and resolve at least one risk (odds ratio 1.60, 95% CI 1.15–2.22, number needed to treat ⁹ , 95% CI 6 –29).
Quality Appraisal	Limitations: Inability to deliver a minimum number of intervention sessions to 46% of participants; limited number of postpartum booster sessions; high rate of loss to follow-up; 20% of participants

Table 45. Gillum et al. 2009

Publication	Gillum TL, Sun CJ, Woods AB. Can a health clinic-based intervention increase safety in abused women? Results from a pilot study. Journal of Women's Health. 2009;18(8):1259-64.
Study Details	RCT Pilot Study
Study Objectives	To assess the effect of a clinic-based intervention on women's engagement in safety-promoting behaviours.
Inclusion	Women 18 years of age screened positive for recent (past year) IPV
Exclusions	Not mentioned
Population	41 women screened positive for IPV in the past year
Intervention	N 21; a personalized counselling session upon completion of the initial interview to discuss safety-promoting behaviours and individual needs as identified by the woman; A series of 6 phone calls over 3 months (at weeks 1, 2, 4, 6, 8, and 10). Phone calls (5 min- 1hr long; average 20 min) were conducted by a trained community health worker, consisted of goal setting, discussion of safety-promoting behaviours, and identifying needs. Referrals for community resources or assistance with primary care clinic visits were made on participant's request.
Comparator	N: 20; health information brochures, a list of community resources, and a monthly phone call to confirm contact information for ease of follow-up.
Outcomes	Change in safety promoting behaviour; 41 women (20 control, 21 intervention) participated; with only 2 being lost to follow-up. African American= 83%; Age: 23 to 65 yrs., mean 43 yrs; 80% met score for depression as assessed by the CES-D. 61% met criteria for PTSD as assessed by the DTS. DAS, 34%, were in lethal danger. 56% experienced physical abuse and 95% nonphysical abuse. The stage of change: 12.2% women in pre-contemplation; 29.3% in contemplation; 9.7% in preparation, 24.4% in action; 24.4% in maintenance. No differences in age, marital status, education, and job status between control group and intervention group. No differences in stage of readiness, type and severity of physical and nonphysical abuse, risk for lethal harm, safety-promoting behaviours engaged in, number of times community resources used, chronic pain, fatigue, depression, and PTSD symptoms between the two groups. Those who reported more nonphysical abuse, risk for lethal harm, and PTSD symptoms engaged in more safety-promoting behaviours. Analyses revealed significant group difference in safety-promoting behaviours after controlling for the effect of nonphysical abuse, risk of lethal harm, and PTSD symptoms ($F(1, 34) = 13.20, p < 0.01$). On average, those who received the intervention engaged in 3.47 more safety-promoting behaviours. Those who were in the control group performed 0.52 fewer safety-promoting behaviours.
Quality Appraisal	Limitations: pilot study; small sample; selection bias, women may not have reported abuse at true scale

Table 46. Hegarty et al., 2013

Publication	Hegarty, K., O'Doherty, L., Taft, A. Chondros, P., Brown, S., Valpied, J., Astbury, J., Taket, A., Gold, L., Feder, G., Gunn, J. Screening and counselling in the primary care setting for women who have experienced intimate partner violence (WEAVE): a cluster randomised controlled trial. Lancet 2013;382:249-258.
Study Details	Cluster RCT
Study Objectives	To identify the effect of a brief counselling intervention offered by family doctors to women identified through IPV screening in Australia. Counselling interventions should not be expected to decrease violence in women's lives in the short term, which suggests that measuring abuse as a primary outcome in trials or referral to IPV-related services might be problematic. We hypothesised that the intervention will increase women's perceived support and comfort to discuss abuse and thus lead to positive changes in women's self-efficacy and to improvements in women's safety planning and behaviours, mental health, and quality of life.
Inclusion	GPs and women patients
Exclusions	Unable to complete questionnaires
Population	Women (16–50 years of age - mean age 38) who screened positive for fear of their partner in the past 12 months: 272 women and 52 physicians
Intervention	G1: Physician training to deliver a brief IPV counselling intervention n=137 women receiving counselling
Comparator	G2: Usual care n=135
Outcomes	<p>Although the authors warn against expecting a decrease in violence in the short term, it is measured in this study, using CAS. IPV: CAS: No difference between groups in change from baseline to 12 months in % of women with CAS score ≥ 7 (G1 vs. G2): -28 vs. -29; p=NS [Baseline: G1: 101/135 (75) G2: 93/132 (71) 12 months: G1: 44/93 (47) G2: 40/96 (42) Change from baseline to 12 months in % with CAS score ≥ 7 (G1 vs. G2): -28 vs. -29</p> <p>DEPRESSION: Fewer women in the intervention group had a HADS depression score ≥ 8 at 6 months (OR, 0.4; 0.1 to 1.0; p=0.05) and 12 months (OR, 0.3; 0.1 to 0.7; p=0.005) than controls SF-12 mental health status, G1 vs. G2, adj.† mean difference (95% CI), p-value 6 months: 0.8 (-2.3 to 3.9); p=0.61: 12 months: 2.4 (-1.0 to 5.7); p=0.17 WHOQOL-Bref. G1 vs. G2, adj. mean difference (95% CI); p-value Physical, 6 months 4.9 (1.1–8.6), p=0.01 Physical, 12 months 2.7 (-1.4–6.8), p=0.20 Psychological, 6 months 2.5 (-1.2–6.2), p=0.19; Psychological, 12 months 2.3 (-1.5–6.1), p=0.23 Social, 6 months 4.8 (-1.0–10.7), p=0.11 Social, 12 months 2.1 (-4.3–8.5), p=0.52 Environmental, 6 months 1.0 (-2.6–4.7), p=0.57 Environmental, 12 months 1.9 (-1.7–5.5), p=0.29</p> <p>ANXIETY: No difference between groups in % of women with HADS anxiety score ≥ 8 at 6 months (OR, 0.5; 0.2 to 1.3; p=0.14) or 12 months (OR, 0.4; 0.2 to 1.2; p=0.11)</p> <p>SAFETY PLANNING AND BEHAVIOUR: No difference between groups in SF-12 MCS mean scores (G1 vs. G2) at 6 months (0.8; -2.3 to 3.9) or 12 months (1.9; -1.7 to 5.5)</p> <p>QUALITY OF LIFE: no difference between groups on mean WHOQOL-Bref component scores at 6 or 12 months //</p> <p>HARM FROM INTERVENTION: At 6 months, no women in the intervention group agreed strongly (on a 5-point scale) that they felt judged negatively by practice staff for being a participant or responded "worse" to the item "As a result of participating in this trial, I see the quality of my own life as...." No adverse events were reported and the authors detected no evidence of a</p>

difference in harm or abuse between groups.

Quality Appraisal Fair to good quality RCT: lack of masking of providers and patients - low rate of attrition

Table 47. Kiely et al., 2010

Publication	Kiely M, El-Mohandes AA, El-Khorazaty MN, Gantz MG. An integrated intervention to reduce intimate partner violence in pregnancy: a randomized trial. <i>Obstetrics and Gynecology</i>. 2010 Feb;115(2 Pt 1):273.
Study Details	RCT
Study Objectives	To estimate the efficacy of a psycho-behavioural intervention in reducing intimate partner violence recurrence during pregnancy and postpartum and in improving birth outcomes in African-American women.
Inclusion	Women who self-identified as belonging to a minority group, being >18 years, 29 weeks pregnant, a DC resident and English speaking.
Exclusions	Not mentioned
Population	1044 African American pregnant women
Intervention	N 521; Individual in-person CBT aimed at reducing behavioural risks (depression, IPV, smoking, and tobacco exposure); sessions targeted toward specific risks reported by women at that session; IPV components emphasized safety behaviours; IPV intervention: emphasised safety behaviours, provided information about types of abuse and the cycle of violence, provided a Danger Assessment component to assess risks, and preventive options to be considered by women (e.g. filing a protection order), as well as the development of a safety plan. A list of community resources was also provided to women. Behavioural counselling for other risks (depression, smoking, tobacco exposure) in intervention group but not control group
Comparator	N: 523; Usual care
Outcomes	Reduction in IPV during pregnancy and postpartum; Women in the intervention group were less likely to have recurrent episodes of IPV victimization (odds ratio [OR] 0.48, 95% confidence interval [CI] 0.29 – 0.80). Women with minor IPV were significantly less likely to experience further episodes during pregnancy (OR 0.48, 95% CI 0.26 – 0.86, OR 0.53, 95% CI 0.28 – 0.99) and postpartum (OR 0.56, 95% CI 0.34 – 0.93). Numbers needed to treat were 17, 12, and 22, respectively, as compared with the usual care group. Women with severe IPV showed significantly reduced episodes postpartum (OR 0.39, 95% CI 0.18 – 0.82); the number needed to treat was 27. Women who experienced physical IPV showed significant reduction at the first follow-up (OR 0.49, 95% CI 0.27– 0.91) and postpartum (OR 0.47, 95% CI 0.27– 0.82); the numbers needed to treat were 18 and 20, respectively. Women in the intervention group had significantly fewer very preterm neonates (1.5% intervention group, 6.6% usual care group; P.03) and an increased mean gestational age (38.23.3 intervention group, 36.95.9 usual care group; P.016).
Quality Appraisal	Limitations: Self report; Sample included only high risk pregnant African American. Limited generalisability to a broader population.

Table 48. Miller et al., 2016

Publication	Miller E, Tancredi DJ, Decker MR, McCauley HL, Jones KA, Anderson H, James L, Silverman JG. A family planning clinic-based intervention to address reproductive coercion: a cluster randomized controlled trial. Contraception. 2016; 94(1):58-67.
Study Details	A cluster randomized controlled trial;
Study Objectives	To assess short- and longer-term (12 month) effects of an intervention on knowledge and harm reduction and, in turn, on RC, IPV and unintended pregnancy among adolescent and young adult women.
Inclusion	All women's health clinics run by two large FP organizations in western Pennsylvania were eligible to participate
Exclusions	Not mentioned
Population	25 FP clinics were grouped into 17 clusters and then randomized to intervention (11 sites in nine clusters) and control (14 sites in eight clusters) One clinic closed after randomization; another clinic closed after baseline data collection.
Intervention	N 11; 11 sites in nine clusters
Comparator	N: 14;14 sites in eight clusters
Outcomes	Reproductive coercion; Physical and sexual IPV victimization; Incident and unintended pregnancy; Recognition of sexual and reproductive coercion; Self-efficacy to use harm reduction behaviours; Use of harm reduction behaviours; Knowledge of IPV related resources; Use of IPV resources and services.; Among 4009 females aged 16 to 29 years seeking care, 3687 completed a baseline survey; 3017 provided data at 12–20 weeks post-baseline (T2) and 2926 at 12 months post-baseline (T3) (79% retention). Intervention effects were not significant for reproductive coercion [adjusted risk ratio (ARR) 1.50 (95% confidence interval 0.95–2.35)] or partner violence [ARR 1.07 (0.84–1.38)]. Intervention participants reported improved knowledge of partner violence resources [ARR 4.25 (3.29–5.50)] and self-efficacy to enact harm reduction behaviours [adjusted mean difference 0.06 (0.02–0.10)]. At time point-specific models which included moderating effects of exposure to reproductive coercion at baseline, a higher re at baseline was associated with a decrease in reproductive coercion 1 year later (T3). Use and sharing of the domestic violence hotline number also increased.
Quality Appraisal	Limitations: limited generalisability; lost to follow-up rate high

Table 49. Saftlas et al., 2014

Publication	Saftlas AF, Harland KK, Wallis AB, Cavanaugh J, Dickey P, Peek-Asa C. Motivational interviewing and intimate partner violence: a randomized trial. Annals of epidemiology. 2014;24(2):144-50.
Study Details	RCT
Study Objectives	To determine if motivational interviewing (MI) improves self-efficacy (primary outcome), depressive symptoms (secondary outcome), and stage-of-readiness-to-change (secondary outcome) among women in abusive relationships.
Inclusion	Women had to screen positive for IPV by a current partner within the past year and had to be aged 18 years or older, English-speaking, and neither currently pregnant nor incarcerated.

Exclusions	Intoxication at the time of screening; Cognitive impairment or psychosis; Medically unable due to serious current medical illness or injury; Suicidal or homicidal ideation; No identifiable residence or contact phone number; Criminal Justice Involvement/Under arrest at the time of ED visit
Population	306 women experiencing IPV in current relationship over past 12 months
Intervention	N 155; final analysable sample; 98; a 1-hour face-to-face educational session at baseline, followed by three 10- to 15-minute MI telephone sessions conducted 1, 2, and 4 months post-enrolment. At each session, the field coordinators used MI techniques to help women identify the small steps that they could take to improve their physical health, emotional health, social support, quality of work or home life, or their relationship. Women could self-select areas and were not required to focus on the abusive relationship. Women who participated in the full protocol received approximately 90 minutes of MI counselling.
Comparator	N: 155; final analysable sample; 106; Women randomized into the “control” or referral arm of the study met with the field coordinator or an on-site, certified domestic abuse advocate who provided written materials and referrals to community-based resources.
Outcomes	Self-efficacy, depressive symptoms, and stage-of-readiness-to change; Three hundred six eligible women were enrolled (recruitment rate 1=64%); 204 completed the 6-month follow-up (completion rate 1=67%). Depressive symptoms decreased to a greater extent in MI than referral women (P. 0=7). Self-efficacy and stage-of-readiness-to-change increased more in MI than referral women, but these differences were not statistically significant.
Quality Appraisal	Limitations: small sample; risk of bias

Table 50. Sharps, et al., 2016

Publication	Sharps PW, Bullock LF, Campbell JC, Alhusen JL, Ghazarian SR, Bhandari SS, Schminkey DL. Domestic violence enhanced perinatal home visits: The DOVE randomized clinical trial. Journal of Women's Health. 2016;25(11):1129-38.
Study Details	RCT
Study Objectives	This study evaluated the effectiveness of an IPV intervention in reducing violence among abused women in perinatal home visiting programs.
Inclusion	English-speaking pregnant women aged 14 years or older, low income (i.e., Medicaid eligible), less than 32 weeks gestation, experiencing perinatal IPV by a current or past partner, and enrolled in a perinatal home visiting program of a participating agency
Exclusions	Not mentioned
Population	239 pregnant women
Intervention	N 124; DOVE - The Domestic Violence Enhanced Home Visitation Program: a structured abuse assessment and six home visitor-delivered empowerment sessions integrated into home visits. Brochure-based IPV empowerment intervention embedded into a home visiting program; tailored to a woman’s expressed need and level of danger; three 15- to 25-min sessions during pregnancy and three postpartum sessions during home visits.
Comparator	N: 115; Standard home-visiting protocol (several different models)

Outcomes	IPV; Depression; a significant decrease in IPV over time ($F = 114.23$; $p < 0.001$) from baseline to 1, 3, 6, 12, 18, and 24 months postpartum (all $p < 0.001$). A significant treatment effect ($F = 6.45$; $p < 0.01$). Women in the DOVE treatment group reported a larger mean decrease in IPV scores from baseline compared to women in the usual care group (mean decline 40.82 vs. 35.87).
Quality Appraisal	Limitations: High refusal rate; higher attrition rate;;

Table 51. Taft et al., 2011

Publication	Taft AJ, Small R, Hegarty KL, Watson LF, Gold L, Lumley JA. Mothers' AdvocateS In the Community (MOSAIC)-non-professional mentor support to reduce intimate partner violence and depression in mothers: a cluster randomised trial in primary care. <i>BMC public health</i> . 2011;11(1):178.
Study Details	Clustered RCT
Study Objectives	To reduce IPV and/or depression among women pregnant and/or with children under five whom GPs or MCH nurses identify as abused or at risk (psychosocially distressed); and to strengthen the general health and wellbeing and mother-child bonding of abused or at-risk women.
Inclusion	Women aged 16 and over attending GPs or MCH nurses were eligible to be referred to the study if they were pregnant or had at least one child five years or younger, and disclosed IPV or were psychosocially distressed. Psychosocial distress included women who had not disclosed, but whose symptoms (depression, anxiety, frequent attendance without obvious cause etc) were indicative of abuse.
Exclusions	Women with serious mental illness and were not taking medication, or their English was inadequate for informed consent, except for Vietnamese women, as Vietnamese bilingual staff and mentors participated in a sub-study.
Population	215 women
Intervention	N 167; 12 months of weekly home visiting from trained and supervised local mothers, (English & Vietnamese speaking) offering non-professional befriending, advocacy, parenting support and referrals.
Comparator	N: 91; Clinician care
Outcomes	IPV; Maternal depression; General health and wellbeing; parenting stress and attachment; Social support; women's use of and satisfaction with their primary care services.; There was evidence of a true difference in mean abuse scores at follow-up in the intervention compared with the comparison arm (15.9 vs 21.8, AdjDiff -8.67, CI -16.2 to -1.15). There was weak evidence for other outcomes, but a trend was evident favouring the intervention: proportions of women with CAS scores ≥ 7 , 51/88 (58.4%) vs 27/42 (64.3%) AdjOR 0.47, CI 0.21 to 1.05); depression (EPDS score ≥ 13) (19/85, 22% (I) vs 14/43, 33% (C); AdjOR 0.42, CI 0.17 to 1.06); physical wellbeing mean scores (PCS-SF36: AdjDiff 2.79; CI -0.40 to 5.99);
Quality Appraisal	Limitations: reduced power; small sample size

Table 52. Zlotnick et al., 2018

Publication	Zlotnick C, Wernette GT, Raker CA. A randomized controlled trial of a computer-based brief intervention for victimized perinatal women seeking mental health treatment. Archives of women's mental health. 2018; 7:1-11
Study Details	RCT
Study Objectives	To examine the feasibility, acceptability, and the preliminary efficacy of a brief, motivational computer-based intervention, SURE (Strength for you in Relationship Empowerment), for perinatal women with IPV seeking mental health treatment.
Inclusion	Perinatal women, 18 years of age or older, English-speaking, and reported experiencing IPV in the past 12 months
Exclusions	Women who were accompanied by someone else
Population	53 Perinatal women seeking help at MH clinic. 28 randomized to treatment group.
Intervention	N 28; The SURE includes a parrot avatar with a female voice that addresses the participant by name, serves as a guide and narrator for the program, and reads all content aloud. SURE presents information and education regarding the types of IPV; associated risks for the woman, fetus, and offspring; potential health problems associated with relationship abuse; and risks of untreated mental health problems. The SURE emphasizes the bidirectional relationship between mental health and IPV and the narrator assessed the participant's readiness to utilize resources (e.g., remain in mental health treatment, use IPV hotlines, talk to health care provider/support person about IPV and IPV resources). Participants had the option to create a personalized safety plan that offered tailored advice for decision-making that maximizes their safety. They were given the option of selecting from a menu of potential personal change goals (autonomy) to learn more about specific topics, such as building support for IPV, building self-esteem, safety planning for IPV, breaking up with an abusive partner, and how to talk to a mental health care provider about seeking IPV resources and/or managing anger towards the abuser. These topics were presented as a series of empowerment videos that depicted women presenting on a topic, how they managed (or skills they used for) a specific IPV-related issue, and related positive outcome. Women were provided with optional printouts of related materials from the intervention as a resource as well as empowerment messages reinforcing the video content.
Comparator	N: 25; watching brief segments of popular television shows and following up with questions for ratings of their preference.
Outcomes	Client Satisfaction Questionnaire Revised (CSQ-8-R); The Composite Abuse Scale (CAS); the degree of IPV decreased significantly from baseline to the 4-month follow-up for the SURE condition (paired t-test, $p < 0.001$), while the control group was essentially unchanged. Moreover, there was a significant reduction in emotional abuse for SURE participants ($p = 0.023$) relative to participants in the control condition. There were also reductions in physical abuse, although non-significant ($p = .060$).
Quality Appraisal	Limitations: small sample size; limited generalizability;

Data Extraction: Studies relevant to criterion 11 & 13

Table 53. CASP Quality Assessment of Studies related to Screening Effectiveness

Questions	Klevens⁸⁹	Klevens^{88, 90, 91}
01 Did the trial address a clearly focused issue?	Yes	Yes
02 Was the assignment of patients to treatments randomised?	Yes	Yes
03 Were all of the patients who entered the trial properly accounted for at its conclusion?	No	Yes
04 Were patients, health workers and study personnel 'blind' to treatment?	Partial – study personnel, yes	Partial – study personnel, yes
05 Were the groups similar at the start of the trial	Yes	Yes
06 Aside from the experimental intervention, were the groups treated equally?	Yes	Yes
07 How large was the treatment effect?	Not significant	Not significant
08 How precise was the estimate of the treatment effect?	No treatment effect – see outcomes below	4 points in QOL score
09 Can the results be applied to the local population, or in your context?	Partial – USA, poor, predominantly Non-White	Partial – USA, poor, predominantly Non-White
10 Were all clinically important outcomes considered?	No – main focus was positive and negative reaction to screening plus disclosure rates	Yes – taking in all three studies
11 Are the benefits worth the harms and costs?	Insufficient data	No

Table 54. Klevens et al 2012

Study Reference	Klevens J, Sadowski L, Kee R, Trick W, Garcia D. Comparison of screening and referral strategies for exposure to partner violence. Women's health issues. 2012 22(1):e45-52.
Study Design	Quantitative; RCT
Study Objectives	This study is relevant to Q2, (accuracy of partner violence screening tools) and Q3, (the effectiveness of screening in low-IPV-risk areas). This table relates to Q2. Another table summarising the study is produced below in the section on Q3.
Inclusion	Women ≥18 years unaccompanied by a partner or child over 3 years.
Exclusions	Women who did not speak English, were accompanied by their partner or a child over 3 years of age without alternative adequate provision for child care, or who were visually, hearing, or mentally impaired
Population	126 Women ≥18 years seeking clinical services who could be separated from a partner or child >3 years: Women's health clinics (obstetrical, gynaecological, and family planning clinics) at a public hospital Country: USA; 94% non-White
Intervention	Q2) 3-item Partner Violence Screen PVS administered face-to-face (n=46); Q3) If positive, HCP support and referral
Comparator	Q2) 3-item Partner Violence Screen PVS administered CASI (n=80): Q3) If positive – a printout of locally available resources, plus encouragement to contact these resources OR a short video clip providing support and encouraging help seeking, plus the computer printout of resources.
Outcomes	Q2) Screening outcomes: Higher rates of disclosure for those who received computerized screening, but not statistically significant (21% v 9% p = 0.7); Screening method preference and use of referral strategies did not differ between the two groups. Q3) Support outcomes: impact of IPV screening – 6% (n=6) reported negative reactions to screening such as feeling afraid or bothered; At one week on, 96% (n=98) recalled receiving the list; 4/36 (11%) of those screened by a HCP had taken up services from the list and 2/66 (3%) of women in the computer-based screening groups.
Quality Appraisal	The study was assessed using CASP checklist; as having: Appropriate statement of aims, methodology, research design, explanation of researcher/participant relationship. Insufficient information on recruitment, data collection, data analysis, ethics and statement of findings. Insufficient information on ethics and clear statement of findings. Other points: Limitations: small sample size and lack of clarity regarding gender of partners.; limited generalizability

Table 55. Klevens et al 2012 and 2015A [3-year follow-up] and 2015B [1-year secondary analysis of data]

Study Reference	<p>[Klevens 2012] Klevens J, Kee R, Trick W, Garcia D, Angulo FR, Jones R, Sadowski LS. Effect of screening for partner violence on women's quality of life: a randomized controlled trial. <i>Jama</i>. 2012;308(7):681-9.</p> <p>[Klevens 2015A] Klevens J, Sadowski LS, Kee R, Garcia D, Lokey C. Effect of screening for partner violence on use of health services at 3-year follow-up of a randomized clinical trial. <i>Jama</i>. 2015;314(5):515-6. [This is a research letter to JAMA with limited information.]</p> <p>[Klevens 2015B] Klevens J, Sadowski LS, Kee R, Garcia D. Does screening or providing information on resources for intimate partner violence increase women's knowledge? Findings from a randomized controlled trial. <i>Journal of women's health, issues & care</i>. 2015;4(2).</p>
Study Design	Quantitative; RCT
Study Objectives	<p>To determine the effect of computerized screening for partner violence plus the provision of a partner violence resource list vs provision of a partner violence list only on women's health in primary care settings, compared with a control group:</p> <p>Klevens 2012: Data at 12 months Klevens 2015A: Data at 3 years</p> <p>Klevens 2015B: Secondary analysis of 1-year data to examine outcomes relating to knowledge and attitudes based on the different interventions. Because information about IPV may impact women differently according to their experiences with IPV, these outcomes were examined among four subgroups: women experiencing any IPV in their lifetime, women experiencing IPV in the year previous to enrolment, women experiencing IPV in the year after enrolment, and women who have never experienced IPV.</p>
Inclusion	Women seeking clinical services at the study sites were eligible if they were at least 18 years of age, spoke and understood English or Spanish, had access to a telephone, and would share contact information for at least 1 reliable phone number for follow-up.
Exclusions	Women accompanied by their partner and could not be safely separated at the clinical enrolment site, were accompanied by a child older than 3 years without alternative adequate provision for child care, or were visually, hearing, or mentally impaired.
Population	<p>2700 Women ≥18 years seeking clinical services who could be separated from a partner or child >3 years. 2364 were re-contacted a year later; at 3 years an unstated number were re-contacted; at both 12 months and 3 years data were adjusted for missingness.</p> <p>For Klevens 2015B: 1210: G1: 417; G2 404; G3 389.</p>
Intervention	For 2012/2015A: Group 1: Computerized screening (3-item Partner Violence Screen); women with a positive response to ≥1 question were shown a brief video providing support, information about a hospital-based IPV advocacy program and encouraged to seek help; they were also given a printout with resources (e.g., local partner violence advocacy programs, 24-hour hotlines,

	women’s shelters) (n-909)
	For 2015B: Group 1 was compared with Group 2; then both Groups 1 & 2 (i.e. receiving an IPV information intervention of some sort) were compared with Group 3 (usual care – no screening and no information).
Comparator	For 2012/2015A: Group 2: IPV resource list (no screening, all women received an IPV resource list) (n-893) Group 3: Control group: No screening, no-partner violence list control group (n-898)
Outcomes	<p>Klevens 2012: 1-year follow-up (attrition 13% - imputation for missing data): IPV outcome: exposure based on 18 questions adapted from a National service: Groups 1,2 and 3: Incidents of IPV – G1 96/909; G2 101/893; G3 83/898: Odds ratio: G1vG2 1.2 (CI 0.9-1.6); G1vG3 1.0 (0.8-1.4); G2vG3 1.1 (0.8-1.5)</p> <p>Quality of life QOL – measured by SF-12 subscales combined to form 1) a physical health and 2) a mental health composite scale PCS and MCS. PCS at 1-year G1 46.8 (46.1-47.4); G2 46.4 (45.8-47.1); G3 47.2 (46.5-47.8). MCS at 1-year G1 48.3 (47.5-49.1); G2 47.9 (47.2-48.7); G3 47.8 (47-48.5). Hospitalization at 1 year (mean): G1 0.2 (0-0.3); G2 0.1 (0-0.3); G3 0.2 (0-0.3)</p> <p>ED visits at 1 year: G1 0.3 (0.2-0.4); G2 0.3 (0.2-0.4); G3 0.3 (0.2-0.4)</p> <p>Ambulatory visits at 1 year G1 5.4 (3.8-7.0); G2 5.7 (4.1-7.3); G3 5.9 (4.3-7.4)</p> <p>Klevens 2015A: 3-year follow up (attrition, not stated, although figures are adjusted for missing data).</p> <p>Hospitalization at 3 years: G1 0.2 (0.1-0.4); G2 0.3 (0.1-0.4); G3 0.2 (0.1-0.4)</p> <p>ED visits at 3 years: G1 0.6 (0.4-0.8); G2 (0.5-0.9); G3 0.6 (0.4-0.9)</p> <p>Ambulatory visits at 3 years: G1 12.7 (8.9-6.2); G2 12.2 (8.4-16.1); G3 11.6 (7.7-15.4)</p> <p>Klevens 2015B: Knowledge of prevalence of IPV: Knowledge of negative impact of IPV on health: Knowledge of availability of services for IPV (i.e. “Yes” if agree with statement “Women who are hurt by their partners can get help if they need it”): Knowledge of available services for IPV (i.e. “Yes” if can name a local service): Knowledge of responsibility for IPV (i.e. the woman is not to blame)</p> <p>Women divided into further four subgroups based on exposure to IPV: 1) in lifetime 2) in year prior to enrolment 3) in year</p>

following enrolment 4) never. Total = 2362 of which 1210 experienced some form of IPV.

No differences in any item of knowledge were found across these subgroups except “responsibility for IPV”: full data analysis is not provided, but the authors report that “there were no differences between women screened and provided with an IPV resource list compared to a control group as to women’s awareness of the frequency of IPV, its impact on physical or mental health, or the availability of IPV services in their community. However, among women who were victims of IPV in the year before or the year after enrolment, those who were provided a list of IPV resources without screening were significantly less likely to know that IPV is not the victim’s fault than those in the control or list plus screening conditions.”

**Quality
Appraisal**

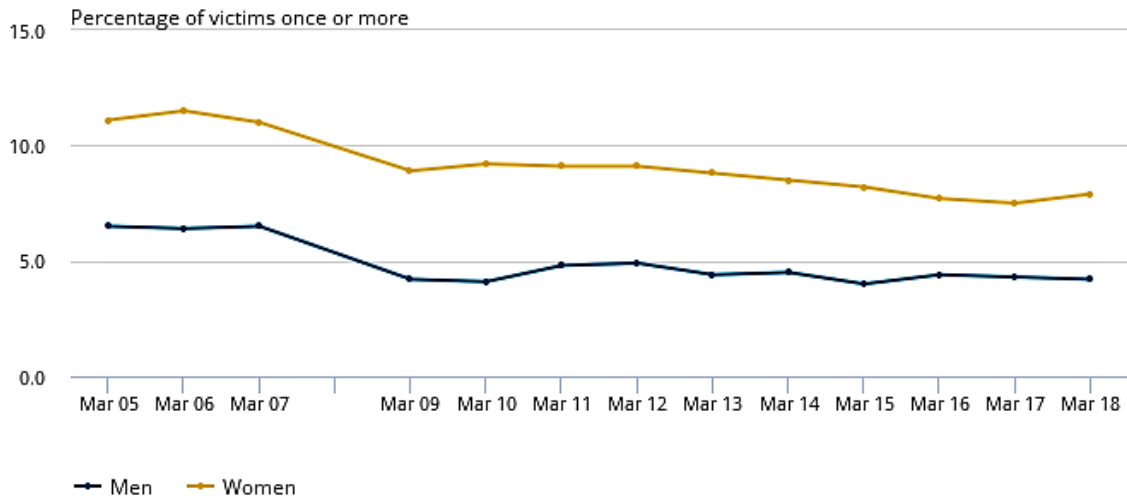
The study was assessed using CASP checklist taking the three studies together; it was assessed as having: Appropriate – statement of aims, methodology, research design, recruitment, explanation of researcher/participant relationship, data collection, data analysis, ethics and statement of findings.

Other points: 12% lost to follow-up at one year; Generalizability limited by the urban setting; Recall bias.

Appendix 4 – Additional Figures

Figure 2. Prevalence of domestic abuse in the last year for adults aged 16 to 59 years, by sex

England and Wales, year ending March 2005 to year ending March 2018

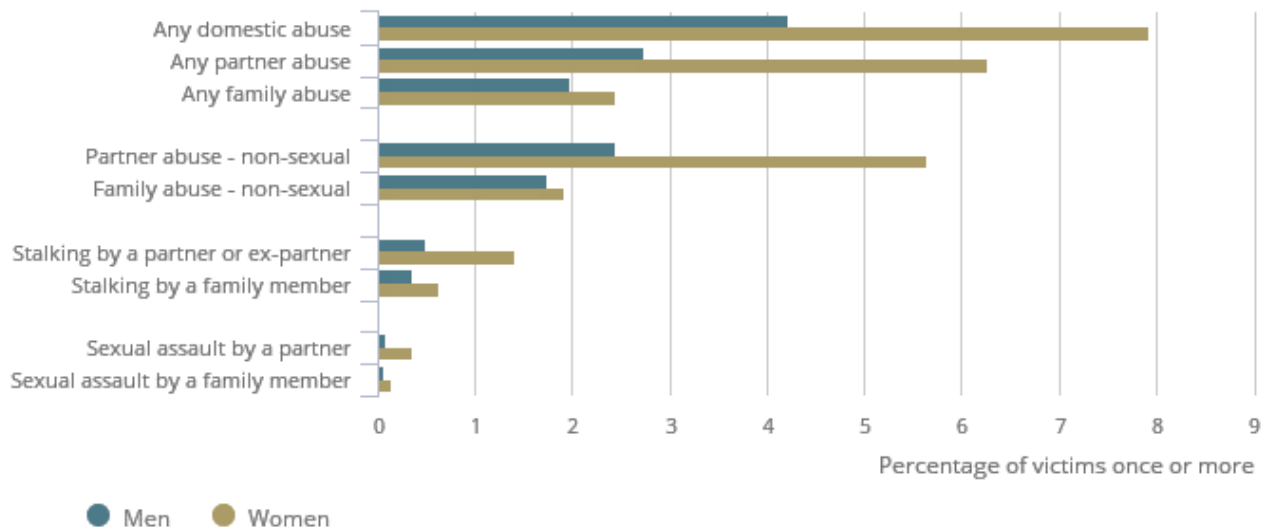


Source: Crime Survey for England and Wales, Office for National Statistics

No data point is available for the year ending March 2008 because comparable questions on stalking, an offence that makes up the domestic abuse category, were not included in that year.

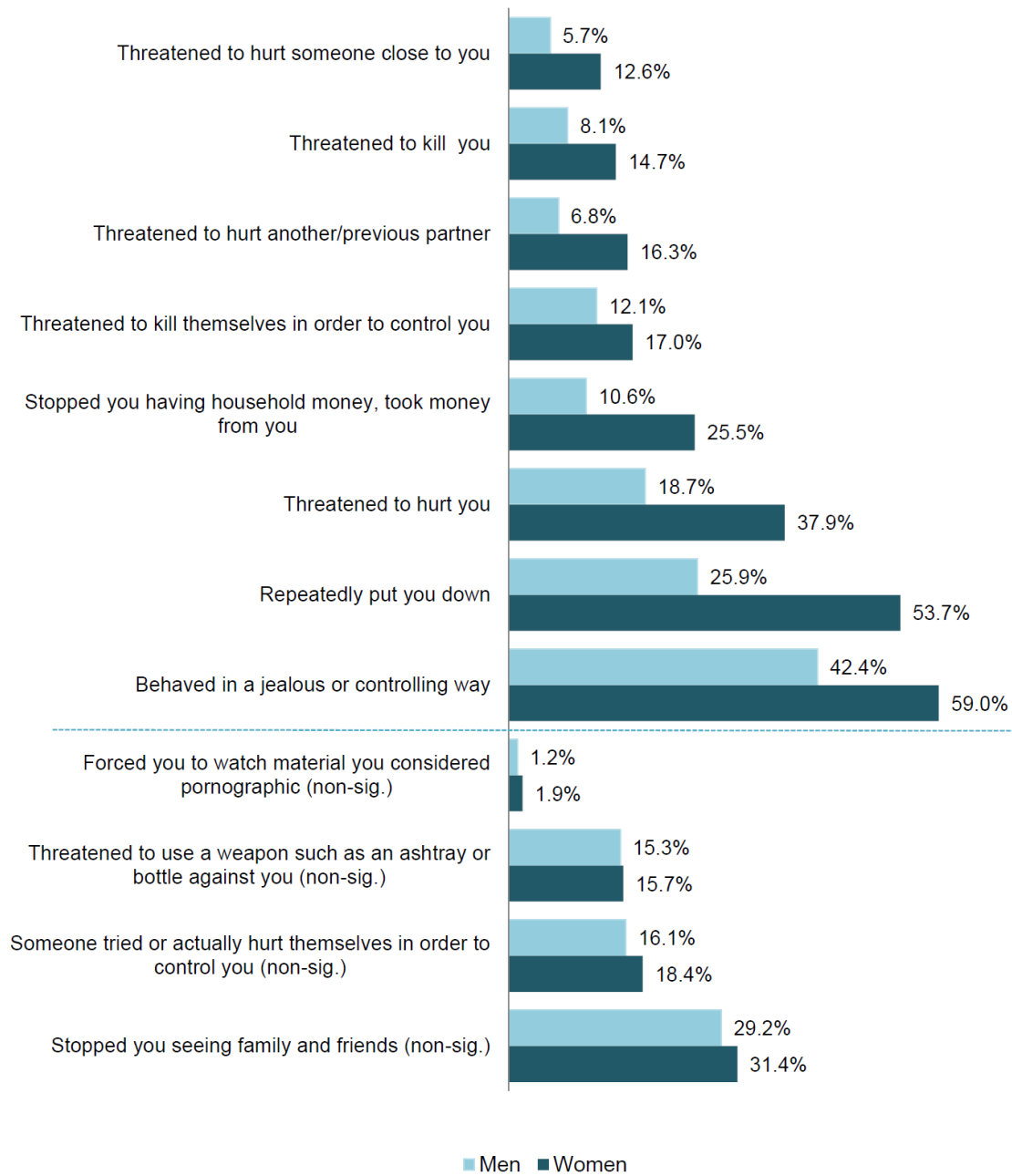
Figure 3. Prevalence of domestic abuse in the last year for adult aged 16 to 59 years, by sex and type of abuse

England and Wales, year ending March 2005 to year ending March 2018



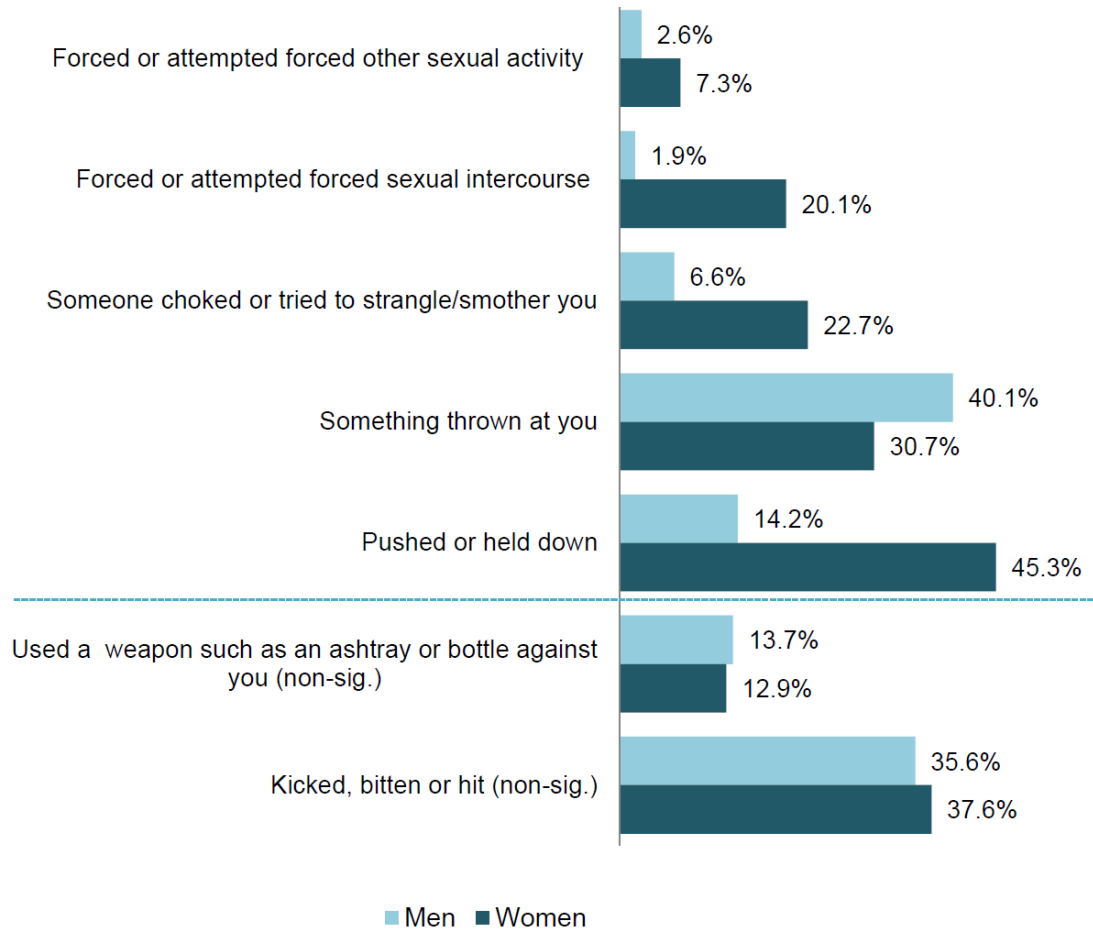
Source: Crime Survey for England and Wales, Office for National Statistics

Figure 4. Type of psychological abuse experienced by victim since age 16 by gender



Source: Scottish Crime and Justice Survey 2014-15: Partner abuse

Figure 5. Type of physical abuse since age 16, by gender (%)



Source: Scottish Crime and Justice Survey 2014-15: Partner abuse

Appendix 5 – List of Abbreviations

A&E	Accident and Emergency (also see ED)
AAS	Abuse Assessment Screen
AMSTAR	Assessment of Multiple Systematic Reviews'
APGAR	Appearance, Pulse, Grimace, Activity, Respiration
AXIS	Appraisal tool for Cross-Sectional Studies.
BDI	Beck Depression Inventory
CAS	Composite Abuse Scale
CAS	Composite Abuse Scale
CASI	Computer Assisted -Self Interview
CASP	Critical Appraisal Skills Programme
CBT	Cognitive Behavioural Therapy
CES-D	Centre for Epidemiologic Studies Depression Scale
CI	Confidence Intervals
CSEI	Coppersmith Self-Esteem Inventory
CTS -2	Conflict Tactic Scale 2
DAS	Danger Assessment Component to Assess
DOVE	Domestic Violence Enhanced Home Visitation Programme
DV	Domestic Violence
DVA	Domestic Violence and Abuse
ED	Emergency Department
FP	Family Planning
FTFI	Face -to -Face Interview Screening
GASP	Gay Abuse Screening Protocol
GHQ	General Health Questionnaire
GP	General practice
GSE	Generalized Perceived Self -Efficacy
GUM	Gynaecology Genitourinary Medicine

HARK	Humiliation, Afraid, Rape, Kick
HCP	Health Care professionals
HITS Tools	Hurts, Insults, Threatens and Screams
HIV	Human Immunodeficiency Virus
IES	Impact of Events Scale
IPV	Intimate Partner Violence
ISA	Index Spouse Abuse
LBW	Low Birth Weight
MARACs	Multi-Agency Risk Assessment Conferences
MCH	Maternal Child Health
MEDLINE	Medical Literature Analysis and Retrieval System Online
MET	Motivational Enhancement Therapy
MI	Motivational Interviewing
MMAT	Mixed Method Assessment Tools
NICE	National Institute for Health and Care Excellence
NPV	Negative Predictive value
NSC	National Screening Committee
PCL	Post-traumatic Stress Disorder Checklist
PICO	Patient, Intervention, Comparison, Outcome
PPV	Positive Predictive Value
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
PSQ	Parent Screening Questionnaire
PsYciINFO	American Psychological Association and distributed on the association's
PTSD	Post-Traumatic Stress Disorder
PVS	Partner Violence Screen
RCTs	Randomised Controlled Trials
ReCESS	Reporting Checklist for Evidence Summaries
SES	Self -Esteem Scale
SF- 36	Short form Health Survey

STAI	State -Trait Anxiety Inventory
STI	Sexual Transmitted infection
SURE,	Strength for U in Relationship Empowerment
UK	United Kingdom
USA	United States of America
VHA	Veteran Health Administration
VTB	Very Preterm Birth
WAST	Woman Abuse Screening Tools
WEB	Women's Experience with Battering Scale
WHO	World Health Organization

Appendix 6 – UK NSC reporting checklist for evidence summaries

All items on the UK NSC Reporting Checklist for Evidence Summaries have been addressed in this report. A summary of the checklist, along with the page or pages where each item can be found in this report, is presented in Table 56.

Table 56. UK NSC reporting checklist for evidence summaries

Section	Item	Page no.
1.	TITLE AND SUMMARIES	
1.1	Title sheet	Identify the review as a UK NSC evidence summary. Title page
1.2	Plain English summary	Plain English description of the executive summary.
1.3	Executive summary	Structured overview of the whole report. To include: the purpose/aim of the review; background; previous recommendations; findings and gaps in the evidence; recommendations on the screening that can or cannot be made on the basis of the review.
2.	INTRODUCTION AND APPROACH	
2.1	Background and objectives	<p>Background – Current policy context and rationale for the current review – for example, reference to details of previous reviews, basis for current recommendation, recommendations made, gaps identified, drivers for new reviews</p> <p>Objectives – What are the questions the current evidence summary intends to answer? – statement of the key questions for the current evidence summary, criteria they address, and number of studies included per question, description of the overall results of the literature search.</p> <p>Method – briefly outline the rapid review methods used.</p>
2.2	Eligibility for inclusion in the review	State all criteria for inclusion and exclusion of studies to the review clearly (PICO, dates, language, study

		type, publication type, publication status etc.) To be decided <i>a priori</i> .	
2.3	Appraisal for quality/risk of bias tool	Details of tool/checklist used to assess quality, e.g. QUADAS 2, CASP, SIGN, AMSTAR.	
3. SEARCH STRATEGY AND STUDY SELECTION (FOR EACH KEY QUESTION)			
3.1	Databases/sources searched	Give details of all databases searched (including platform/interface and coverage dates) and date of final search.	
3.2	Search strategy and results	<p>Present the full search strategy for at least one database (usually a version of Medline), including limits and search filters if used.</p> <p>Provide details of the total number of (results from each database searched), number of duplicates removed, and the final number of unique records to consider for inclusion.</p>	
3.3	Study selection	State the process for selecting studies – inclusion and exclusion criteria, number of studies screened by title/abstract and full text, number of reviewers, any cross checking carried out.	80
4. STUDY LEVEL REPORTING OF RESULTS (FOR EACH KEY QUESTION)			
4.1	Study level reporting, results and risk of bias assessment	<p>For each study, produce a table that includes the full citation and a summary of the data relevant to the question (for example, study size, PICO, follow-up period, outcomes reported, statistical analyses etc.).</p> <p>Provide a simple summary of key measures, effect estimates and confidence intervals for each study where available.</p> <p>For each study, present the results of any assessment of quality/risk of bias.</p>	<p>Study level reporting:</p> <p>Quality assessment:</p>
4.2	Additional analyses	Describe additional analyses (for example, sensitivity, specificity, PPV, etc.) carried out by the reviewer.	<p>[Remove if not performed]</p> <p>Study level analyses within data extraction tables: x</p> <p>Meta-analysis: Error! Bookmark not defined.</p>
5. QUESTION LEVEL SYNTHESIS			

<p>5.1 Description of the evidence</p>	<p>For each question, give numbers of studies screened, assessed for eligibility, and included in the review, with summary reasons for exclusion.</p>
<p>5.2 Combining and presenting the findings</p>	<p>Provide a balanced discussion of the body of evidence which avoids over reliance on one study or set of studies. Consideration of four components should inform the reviewer's judgement on whether the criterion is 'met', 'not met' or 'uncertain': quantity; quality; applicability and consistency.</p>
<p>5.3 Summary of findings</p>	<p>Provide a description of the evidence reviewed and included for each question, with reference to their eligibility for inclusion.</p> <p>Summarise the main findings including the quality/risk of bias issues for each question.</p> <p>Have the criteria addressed been 'met', 'not met' or 'uncertain'?</p>
<p>6. REVIEW SUMMARY</p>	
<p>6.1 Conclusions and implications for policy</p>	<p>Do findings indicate whether screening should be recommended?</p> <p>Is further work warranted?</p> <p>Are there gaps in the evidence highlighted by the review?</p>
<p>6.2 Limitations</p>	<p>Discuss limitations of the available evidence and of the review methodology if relevant.</p>

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