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Advocacy interventions to reduce or eliminate violence and promote the physical and psychosocial well-being of women who experience intimate partner abuse

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Campbell Systematic Reviews

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Abstract

BACKGROUND

Intimate partner abuse is common in all societies and damages the health of survivors and their children in the short and long term. Advocacy may decrease the impact of this abuse on women's health.

OBJECTIVES

To assess the effects of advocacy interventions conducted within or outside of health care settings on women who have experienced intimate partner abuse.

SEARCH METHODS

We searched: CENTRAL and DARE (Cochrane Library Issue 3, 2008), MEDLINE (1966 to 31/7/08), EMBASE (1980 to 2008 week 30), and 11 other databases, to end July 2008. We also searched relevant websites, reference lists and forward citation tracking of included studies, and handsearched six key journals. We contacted principal investigators and experts in the field.

SELECTION CRITERIA

Randomised controlled trials comparing advocacy interventions for women with experience of intimate partner abuse against usual care.

DATA COLLECTION AND ANALYSIS

Two reviewers independently assessed trial quality and undertook data extraction. For binary outcomes we calculated a standardised estimation of the odds ratio (OR) and for continuous data we calculated either a standardised mean difference (SMD) or a weighted mean difference (WMD), both with a 95% confidence interval.

RESULTS

We included ten trials involving 1527 participants. The studies were heterogeneous in respect of: intensity of advocacy, outcome measures and duration of follow-up (immediately post-intervention to three years), permitting meta-analysis for only a minority of outcomes. Intensive advocacy (12 hours or more duration) may help terminate physical abuse in women leaving domestic violence shelters or refuges at 12-24 months follow-up (OR 0.43, 95% CI 0.23 to 0.80), but not at up to 12 months follow-up. The evidence indicates that intensive advocacy may improve quality of life at up to 12 months follow-up, but the confidence intervals included zero (WMD 0.23, 95% CI 0.00 to 0.46). Depression did not improve following intensive advocacy at up to 12 months follow-up (WMD -0.05, 95% CI -0.19 to 0.09), nor did psychological distress (SMD -0.16, 95% CI -0.39 to 0.06). Only two meta-analyses of brief advocacy interventions (less than 12 hours duration) were possible; an increased use of safety behaviours was consistent with the receipt of brief advocacy both at up to 12 months (WMD 0.60, 95% CI 0.14 to 1.06) and at 12-24 months (WMD 0.48, 95% CI 0.04 to 0.92) follow up.

AUTHORS' CONCLUSIONS

Based on the evidence reviewed, it is possible that intensive advocacy for women recruited in domestic violence shelters or refuges reduces physical abuse one to two years after the intervention but we do not know if it has a beneficial effect on their quality of life and mental health. Similarly, there is insufficient evidence to show if less intensive interventions in healthcare settings for women who still live with the perpetrators of violence are effective.

1 Plain language summary

ADVOCACY INTERVENTIONS TO HELP WOMEN WHO EXPERIENCE INTIMATE PARTNER ABUSE

The World Health Organisation estimates that between 10% and 50% of women worldwide report having been assaulted physically or sexually by an intimate partner at some time in their lives, and when threats, financial and emotional abuse are included the prevalence rates are even higher. Abused women can suffer injury and long-lasting physical and emotional health problems. One form of intervention to assist these women is advocacy. Advocacy interventions aim to help abused women directly by providing them with information and support to facilitate access to community resources. However, before recommending them to health policy makers we need to know whether they improve the health and well-being of abused women. In other words, are advocacy interventions effective?

After searching the world literature for randomised controlled trials evaluating advocacy programmes for abused women, we found ten trials, involving 1,527 women. The studies comparing advocacy with "usual care" were conducted in a variety of settings both within and outside of healthcare. Participants were recruited from diverse ethnic populations and across a wide age range (15-61 years), but many had a relatively deprived socioeconomic status. Most were experiencing current, often severe, abuse. All of the interventions sought to empower the women by helping them to achieve their goals. They differed in: duration (from 30 minutes to 80 hours), the outcomes reported, and the length of time the women were followed up.

The evidence is consistent with intensive advocacy decreasing physical abuse more than one to two years after the intervention for women already in refuges, but there is inconsistent evidence for a positive impact on emotional abuse. Similarly, there is equivocal evidence for the positive effects of intensive advocacy on depression, quality of life and psychological distress. There is evidence that brief advocacy increases the use of safety behaviours by abused women.

Taken as a whole, we conclude that at present there is equivocal evidence to determine whether intensive advocacy for women recruited in domestic violence shelters or refuges has a beneficial effect on their physical and psychosocial well-

being. Further, we do not know if less intensive interventions in healthcare settings are effective for women who still live with abusive partners. Too few studies evaluated interventions of comparable intensity and duration, measured the same outcomes, or had comparable follow-up periods.

2 Background

2.1 DESCRIPTION OF THE CONDITION

Intimate partner abuse

For the purpose of this review, intimate partner abuse (often termed domestic violence) is defined as abuse of a woman by a male or female partner who currently is, or formerly was, in an intimate relationship with the woman. Intimate partner abuse perpetrated by women or men against male partners or ex-partners also occurs but it is not included in this review because the outcomes, and possibly the risks for partner violence perpetration by each gender, are likely to be different and should not therefore be included in the same review. The majority of abuse with serious health and other consequences is that committed by men against their female partners (Henwood 2000). Abuse perpetrated by ex-partners is included in the review since often a woman is at greatest risk when she is preparing to leave or has just left her partner. It is estimated that between 65% and 75% of women killed by abusive partners are killed while leaving or after already leaving the relationship (Wilson 1993). Intimate partner abuse may take various forms, including physical violence (ranging from slaps, punches and kicks to assaults with a weapon, choking and homicide), sexual violence (such as forced sex, or forced participation in sexual acts), emotionally abusive behaviours (such as stalking, surveillance, threats of abuse, threats to remove children from the household, prohibiting a woman from seeing her family and friends, ongoing belittlement or humiliation, or intimidation), economic restrictions (such as preventing a woman from working, confiscating her earnings, restricting access to funds), and other controlling behaviours (Watts 2002). Additionally, disabled women in abusive relationships may experience withholding of orthotic equipment, medications, transportation, or essential assistance with personal tasks, such as dressing or getting out of bed (Nosek 1998). The different forms of abuse often co-exist, but they may also present in isolation (Taft 2001). Partner abuse may also co-exist with other forms of violence within families, such as child abuse or elder abuse, but such abuse is not the focus of this review.

Prevalence of intimate partner abuse

The 2001 British Crime Survey found that 20% of women in England and Wales reported being physically assaulted by a current or former partner at some time in

their lives; and when threats, financial abuse and emotional abuse were included in the definition of intimate partner abuse the prevalence rose to 25% of women (Walby 2004a). Research in the United States indicates that nearly one in three adult women experience at least one physical assault by a partner during adulthood and four million American women experience a serious assault by a partner during an average 12-month period (APAPTFVF 1996). The prevalence of intimate partner abuse among those women seeking health care is higher than that of the general population. In a primary care study, we found a lifetime experience of physical and sexual violence of 41%, with 17% of women experiencing such violence in the past year (Richardson 2002). Abuse of women by their partners is a world-wide phenomenon (Watts 2002). Fifty-one cross-sectional population surveys conducted in various countries on behalf of the World Health Organisation show a lifetime prevalence of between 10%-50% and between 3%-52% for the experience of physical violence in the previous year (WHO 2001; Heise 1999). Disabled women may be at even greater risk of being abused. In a North American sample of women with physical disabilities, 62% reported having experienced emotional, physical, or sexual abuse in their lifetimes (Nosek 1998).

The impact of intimate partner abuse on health of women

Intimate partner abuse can have short-term and long-term negative health consequences for survivors, even after the abuse has ended (Campbell 2002). World Development Reports (World Bank 2006) and statements from the United Nations (Ingram 2005) emphasise that such violence is a significant cause of death and disability on a world-wide scale and the World Health Organisation (Krug 2002) highlights violence against women as a priority health issue.
In 1997, two women in England and Wales were killed each week by their current or former partners (HMSO 1998), a figure that represents 47% of all female homicides for that year (HMSO 1997). In the United States and Canada, 31%-60% of murders of women during the 1990's were committed by intimate partners (Craven 1997; Crawford 1997; Brock 1999). Percentages may be even higher in less industrialised countries, but there is little global data on the murder of abused women (Gartner 1990).

Physical health of abused women

Intimate partner abuse is one of the most common causes of non-fatal injury in women. In the USA a review estimated that 50% of all acute injuries and 21% of all injuries in women requiring urgent surgery were the result of partner abuse (Guth 2000).

Abused women also experience many chronic health problems. The most consistent and largest physical health difference between abused and non-abused women is the experience of gynaecological problems (e.g. sexually-transmitted diseases, vaginal bleeding and infection, genital irritation, chronic pelvic pain, urinary-tract infections) (Campbell 2002). Population based studies from the United States show

that the likelihood of abused women exhibiting these symptoms are three times greater than average (McCauley 1995). Other conditions include chronic pain (e.g. headaches, back pain) and central nervous system symptoms (e.g. fainting and seizures), (Campbell 2002; DiazOlavarrieta 1999), self-reported gastrointestinal symptoms (e.g. loss of appetite, eating disorders) and diagnosed functional gastrointestinal disorders (e.g. irritable bowel syndrome) (DiazOlavarrieta 1999; Coker 2000), and self-reported cardiovascular symptoms (e.g. hypertension, chest pain) (Tollestrup 1999).

Health of abused women during pregnancy

Research evidence shows that intimate partner abuse continues when a woman becomes pregnant - indeed, it may even escalate (Gazmararian 2000; Mezey 1997). A review by Campbell shows that prevalence rates of abuse during pregnancy are very similar in industrialised and non-industrialised countries (Campbell 2002). Most studies in the United States show that between 4%-8% of pregnant abused women are physically abused during pregnancy. This compares closely with 6%-8% during the past year in the United Kingdom, 6%-7% in Canada, at least 7% in South Africa, but is substantially lower than the 11%-21% in Sweden, and 13% in Nicaragua. The health risks for abused mothers and their unborn children are substantial. The most serious outcome is the death of the mother (Parsons 1999) or the foetus (McWilliams 1993; Jejeebhoy 1998). In well-designed studies, the outcome most associated with partner abuse is low birth weight, although there is also evidence for increased risk of miscarriage (Gazmararian 2000; Taft 2004) and foetal injury (Mezey 1997).

Psychosocial health of abused women

The most prevalent mental health sequelae of intimate partner abuse are depression and post-traumatic stress disorder (McCauley 1995; Ratner 1993; Golding 2002; Coid 2003). Women living in abusive relationships are three times more likely to be diagnosed depressed or psychotic (Stark 1996) and they often have feelings of low self-esteem and hopelessness (Kirkwood 1993). Among Australian women attending general practice who have been abused, depressed women are significantly more likely to have experienced combined physical, emotional and sexual abuse than are non-depressed abused women (Hegarty 2004). Living in a violent relationship may exacerbate a predisposition to depression; however, a woman's first exposure to abuse can also be a causal factor for subsequent depression (Campbell 1999; Silva 1997). Abused women are nearly four times as likely to suffer from post-traumatic stress disorder compared with non-abused women, and this can be directly related to experiencing intimate partner abuse (Golding 2002; Silva 1997). There is also evidence from the United States, Scandinavia and Papua New Guinea that increased suicidal tendencies are associated with abuse (Counts 1987; Golding 2002). Other signs of emotional distress associated with intimate partner abuse are self-harm and para-suicide (Stark 1996; Heath 2003), anxiety, insomnia and social dysfunction

(Ratner 1993). A Nicaraguan study found that 70% of cases of emotional distress in women were a direct consequence of abuse (Ellsberg 1999).

In industrialised countries a further mental health problem associated with partner violence is the abuse of alcohol and drugs (McCauley 1995; Ratner 1993; Golding 2002). Substance abuse and intimate partner abuse often co-occur. Women who have experienced physical or psychological violence are fifteen times more likely to abuse alcohol and nine times more likely to abuse drugs than are non-abused women (Stark 1996). There is also evidence that alcohol and drug abuse for some women is directly attributable to intimate partner abuse (Stark 1996; Golding 2002).

The impact of intimate partner abuse on health service usage

Women experiencing intimate partner abuse present to health services very frequently and require wide-ranging medical services (Campbell 2002; Davidson 2001). They are admitted to hospital more often than are non-abused women and are prescribed more medication (Koss 1991; Wisner 1999), particularly analgesia (Lo Fo Wong 2007). A Canadian study set in a hospital accident and emergency department found that abused women access medical care three times more often than non-abused women do (Ratner 1993). There is also evidence of a positive linear relationship between severity of abuse and the use of health-care services (Koss 1991).

It is difficult to calculate the societal economic impact of intimate partner abuse but the costs are high (Walby 2004b). In a study that compared health plans in the United States, a 92% increase in costs was associated with partner abuse, with much of this increased cost being attributable to providing mental health care provision (Wisner 1999). A recent Australian study estimated that in 2002-3 the costs to the community were in the order of AUD8.1 billion with the main contributors being pain, suffering and premature mortality (Access 2004). Thus, in addition to the very serious individual health consequences associated with abuse, there are also wider economic implications for society.

2.2 DESCRIPTION OF THE INTERVENTION

Interventions to improve the health consequences for women who are experiencing or have previously experienced intimate partner abuse

Interventions may be primary, secondary or tertiary. In the context of intimate partner abuse, primary interventions are concerned with preventing the onset of abuse, secondary interventions aim to prevent further abuse, and tertiary interventions deal with the consequences of abuse once the abuse has ceased. The focus of this review is on secondary and tertiary intervention.

A range of such interventions has been evaluated. These may be classified as interventions aimed at directly helping abused women (such as the provision of advocacy or therapy), and those aimed at indirectly helping abused women by improving the response of the professionals with whom they come into contact (such as the introduction of screening protocols or the provision of education and training about intimate partner abuse). In order to have clear evidence about what professionals can do safely and effectively to decrease the impact of intimate partner abuse on women, all such interventions need to be evaluated. To this end, we have planned to conduct a suite of systematic reviews evaluating the effectiveness of interventions to improve the health consequences for women who are experiencing or have previously experienced intimate partner abuse. This review is the first of these and examines the effectiveness of individual advocacy interventions (see also Taft 2008).

Advocacy

In the context of domestic violence services, advocacy is a term that varies within and between countries, depending on institutional settings and historical developments of the role of advocates (Feder 2006a). Advocates engage with individual clients who are being abused, aiming to empower them and linking them to the community services. In some health settings they may also have a role in bringing about system change, catalysing increased recognition by clinicians of women experiencing abuse. For the purposes of this review we define the core activities of advocacy as:

- provision of legal, housing and financial advice
- facilitating access to and use of community resources such as refuges or shelters, emergency housing, and psychological interventions
- provision of safety planning advice

Advocates can also provide ongoing support and informal counselling.
The duration and intensity of the advocacy provided may vary. Crisis or short-term advocacy is of brief duration and involves the advocate working with the abused woman for a limited period of time (although the woman may then be referred on to other more specialised agencies). The duration of such advocacy depends on the needs of the abused woman but generally can range from a single meeting up to about 12 hours (Metters 2009). However, more intensive longer-term advocacy may also be provided. Again, dependent on the needs of the individual woman, this may involve weekly sessions for up to 12 months duration. The heterogeneity in models of advocacy will be explored in more depth in the review itself, based on the descriptions of interventions in the primary studies.

2.3 HOW THE INTERVENTION MIGHT WORK

Advocacy interventions are based around the concept of empowerment: talking through potential solutions with the woman (rather than being prescriptive and telling her what she ought to do), helping the woman to achieve the goals she has set (rather than being directive and setting the goals for her), and helping her to understand and make sense of the situation and her responses to it (Campbell 1993). The aims of advocacy programmes are multifaceted and may include helping abused women to access services, the reduction or cessation of abuse, and the improvement of abused women's physical or psychological health. Advocacy may be offered as a stand alone service, but may also be part of a multi-component, multi-agency intervention. At present, it is not known whether multi-component interventions are more effective than those comprising a single component.

2.4 WHY IT IS IMPORTANT TO DO THIS REVIEW

In this systematic review we examine the effectiveness of advocacy interventions with individual women who are still with their partners, as well as those who have left the abusive relationship. This is because it is known that women who leave violent relationships often continue to be abused, sometimes because the partner pursues them or they choose to return (Mullen 1999; Shalansky 1999), or because the woman enters another abusive relationship (Hegarty 1999; Summerfield 2003). We have included evidence from interventions initiated in any health care setting or from outside of health care services if these interventions reported data on health outcomes or levels of abuse, and if the findings were potentially transferable, for example if referral to an external advocacy agency was a plausible action by a health care professional.

3 Objectives

To assess the effectiveness of advocacy interventions conducted within or outside of health care settings for women who are experiencing or have previously experienced intimate partner abuse.

4 Methods

4.1 CRITERIA FOR CONSIDERING STUDIES FOR THIS REVIEW

Types of studies

Any studies that allocated participants or clusters of participants by a random or a quasi-random method (such as alternate allocation, allocation by birth date, etc) to an advocacy intervention compared with no care or usual care. For this review, we defined "usual care" as that care typically provided at that setting or that care with minimal additions in the form of an information card or leaflet listing the addresses and telephone numbers of local support agencies.

Types of participants

Women aged 15 years and over who experience or have experienced intimate partner abuse, recruited from any setting. Eligible studies could recruit women in any settings, including health care or criminal justice facilities, refuges or domestic violence agencies.

Types of interventions

Any brief (less than 12 hours duration) or intensive (12 or more hours duration) advocacy intervention compared to usual care. Studies were included if the intervention incorporated safety planning with the woman, or the facilitation of access to and use of community resources such as refuges or shelters, emergency housing, and psychological care. Such provision, either with or without ongoing informal support or counselling for the woman, was permissable. We also planned to include studies where advocacy was evaluated as an adjunct to another intervention, such as psychotherapy, but only where advocacy was the only difference between arms of the study; no such studies were identified. Advocacy could be delivered either on an individual basis or in a group environment.

Types of outcome measures

The primary outcome measures were incidence of abuse, quality of life, depression, and anxiety. All other outcomes were secondary.

Primary outcomes

Incidence of abuse
Forms of abuse included:
(i) physical
(ii) sexual
(iii) emotional
(iv) financial
Abuse could be assessed using self-report measures (scales such as Index of Spouse Abuse, Women's Experience of Battering, Conflict Tactics Scale, or a single question about continuing abuse) or from the recording of abuse in medical or police records.

Psychosocial health
(i) quality of life (measures such as SF-36)
(ii) depression (measures such as Center for Epidemiologic Studies Depression Scale)
(iii) anxiety (measures such as Spielberger's State-Trait Anxiety Inventory)

Secondary outcomes

Physical health
(i) deaths, all-cause and partner abuse-related (documented in medical/police records/regional and national databases)
(ii) physical injuries, such as fractures and bruises (self-reported or documented in medical and dental records)
(iii) any chronic health disorders, such as gynaecological problems, chronic pain and gastrointestinal disorders (self-reported or documented in medical and dental records)
(iv) any general measures of physical health (measures such as Daily Symptoms Questionnaire)
(v) pre-term birth (self-reported or documented in medical records)

Psychosocial health
(i) post-traumatic stress (measures such as Impact of Events scale)
(ii) self efficacy (measures such as Generalized Perceived Self-Efficacy Scale)
(iii) self-esteem (measures such as Rosenberg Self Esteem Scale)
(iv) perceived social support (measures such as Sarason's Social Support Questionnaire)
(v) alcohol or drug abuse (measures such as Addiction Severity Index, Alcohol and other Drug Abuse Scale)
(vi) attempted suicide(self-reported or documented in medical records)
(vii) self-harm (self-reported or documented in medical records)
(viii) impact on relationships (self-reported)

Socio-economic outcome measures

(i) income
(ii) housing
(iii) participation in education
(iv) participation in work

'Proxy' or intermediate outcome measures (including take-up of referrals to other agencies)
(i) the use of safety behaviours (e.g. use of coded telephone messages to a friend, keeping clothes at a friend's house, hiding emergency money)
(ii) the use of refuges/shelters
(iii) the use of counselling
(iv) calls to police
(v) police reports filed
(vi) protection orders sought
(vii) maintenance of family ties (i.e. children staying with mother)
We recognised that post-intervention changes in some of these proxy measures may be associated with both 'positive' and 'negative' health outcomes for abused women and require careful interpretation. For instance, increased refuge/shelter usage may reflect proactive behaviour on the behalf of abused women but it may also reflect an escalation of violence that has led to the women needing to seek safety. Where authors reported any adverse outcomes from interventions, such events were recorded and are discussed in the narrative summary.

Timing of outcome assessment
We documented the duration of follow-up in all included studies. We do not know the optimum period of follow-up. Thus, while an intervention may have some immediate positive effects on the health of an abused woman (such as a reduction in physical violence), other outcomes may not be so readily apparent. For example, even after leaving an abusive relationship, a woman may be traumatised for many months afterwards and any positive mental health effects may not be evident for some time. For purposes of this review, we defined short-term follow-up as up to and including 12 months, medium-term follow-up as from 12 to 24 months, and long-term follow-up as more than two years.

4.2 SEARCH METHODS FOR IDENTIFICATION OF STUDIES

Searches were made of the international literature for peer-reviewed and non-peer reviewed studies. There were no language or date restrictions applied to the search strategies used. We chose not to use a trials filter as we wanted the search to be as inclusive as possible. A variety of sources were used to identify studies.

Electronic searches

The following electronic databases were searched:
CENTRAL and DARE (Cochrane Library) searched 2008 (Issue 3)

MEDLINE searched 1966 to 31st July 2008
EMBASE searched 1980 to 2008 week 30
CINAHL searched 1982 to 31st July 2008
National Research Register searched 2006 (Issue 4)
ASSIA searched 1987 to 31st July 2008
Social Science Citation Index 1956 to 31st July 2008
IBSS searched 1951 to July week 4 2008
PsycINFO searched 1806 to week 4 2008
British Nursing Index searched 1994 to 18 August 2008
metaRegister of Controlled Trials searched on 30/7/08
Health Management Information Consortium 1979 to 18 August 2008
Midwives Information and Resource Index searched 1986 to December 2006
The search strategies used to search each database can be found in Appendix 1, Appendix 2, Appendix 3, Appendix 4, Appendix 5, Appendix 6, Appendix 7, Appendix 8, Appendix 9, Appendix 10, Appendix 11 and Appendix 12 . The searches were originally run by Danielle Dunne and Carol Rivas. The updated searches which were run in July 2008 were run by Jo Abbot and Jean Ramsay. The NRR was not updated in 2008 as it had ceased to exist by this point. The MIDRS was not updated because access to this database was no longer possible.
We also searched several other electronic sources. We searched the website of the World Health Organisation (http://www.who.int/topics/violence/en/) and the Violence Against Women Online Resources (http://www.vaw.umn.edu/) website. Other women's health and domestic violence websites were accessed through links from full text articles obtained from the primary search. These websites were explored for relevant material or citations, in a non-systematic manner.

Searching other resources

Handsearching

We handsearched the following journals from 1980 to September 2004: American Journal of Public Health, Australian and New Zealand Journal of Public Health, Journal of Family Violence, Medical Journal of Australia, Violence and Victims, and Women's Health. We did not find any additional papers and did not update hand-searches beyond September 2004.

Citation tracking

We examined the reference lists of acquired papers, and tracked citations forwards and backwards.

Other search strategies

In order to check for possible omissions, we emailed the first or correspondence authors of all the primary studies included in the review and also relevant researchers and members of intimate partner abuse groups and related organisations around the world. Efforts were made to make contacts in European countries where English is not the first language via the Domus Medicus

organisation, and worldwide via the MRC Gender & Health Unit and the Department of Gender and Women's Health at WHO.

4.3 DATA COLLECTION AND ANALYSIS

Selection of studies

Searches were run twice for this review (in 2006 and again in July 2008). Abstracts of articles found were reviewed independently by two review authors in pairs (JR and CR or JR and DD in 2006, JR and GF for the 2008 searches). Where possible, disagreements between the review authors were resolved by discussion. When agreement could not be reached during selections from the 2006 searches, a third review author (GF) was asked to assess whether the study potentially fulfilled the inclusion criteria. Additional information from a study investigator was sought in order to resolve disagreement concerning one study (Trifone 1994). No disagreements occured whilst assessing the 2008 search results.
Full articles for abstracts selected were retrieved and each of the articles was assessed independently against the inclusion criteria by two of the review authors. At this stage, there were no disagreements between reviewers about the appropriateness of a study for inclusion in the review.

Data extraction and management

Data from included studies were extracted by one review author and entered onto electronic collection forms. Any missing information was requested from the first or correspondence authors of papers. All instances of additional statistical data being provided by the study investigators were noted and are distinguished as such in the text (see 'Effects of interventions'). All data extractions were independently checked by a second author. This work was done in pairs by JR, DD, and CR. Again, where possible any disagreements between the two review authors were resolved by discussion and no adjudication by a third author was required. All relevant extracted data were entered into RevMan.

We recorded the following information in the Table of Included Studies:

- Methods: randomisation method, intention to treat analysis, power calculation
- Participants: setting, country, inclusion criteria, exclusion criteria, numbers recruited, numbers dropped out, numbers analysed, age, ethnicity, socioeconomic status, educational background
- Interventions: brief descriptions of intervention (including frequency and duration of intervention events) and usual care provided
- Outcomes: timing of follow-up events, outcomes assessed, scales used
- Notes: where necessary, further information to aid understanding of the study

Assessment of risk of bias in included studies

Methodological quality was assessed independently by two review authors (JR and GF) according to the Cochrane Collaboration Handbook (Higgins 2008a, Higgins 2008b). Review authors independently assessed the risk of bias within each included study based on the following six domains with ratings of 'Yes' (low risk of bias); 'No' (high risk of bias) and 'Unclear' (uncertain risk of bias):

Sequence generation

Description: the method used to generate the allocation sequence was described in sufficient detail so as to enable an assessment to be made as to whether it should have produced comparable groups. Review authors' judgment: was the allocation concealment sequence adequately generated?
Ratings: 'Yes' (low risk of bias); 'No' (high risk of bias) and 'Unclear' (uncertain risk of bias)

Allocation concealment

Description: the method used to conceal allocation sequence was described in sufficient detail to assess whether intervention schedules could have been foreseen in advance of, or during, recruitment. Review authors' judgment: was allocation adequately concealed?
Ratings: 'Yes' (low risk of bias); 'No' (high risk of bias) and 'Unclear' (uncertain risk of bias)

Blinding

Description: any measures used to blind outcome assessors were described in sufficient detail so as to assess possible knowledge of which intervention a given participant might have received. Review authors' judgment: was knowledge of the allocated intervention adequately prevented during the study?
Ratings: 'Yes' (low risk of bias); 'No' (high risk of bias) and 'Unclear' (uncertain risk of bias)

Incomplete outcome data

Description: Data on attrition were reported as well the numbers involved (compared with total randomized), and reasons for attrition were reported or obtained from investigators. Review authors' judgment: were incomplete data dealt with adequately by the reviewers? (See also 'Dealing with missing data', below).
Ratings: 'Yes' (low risk of bias); 'No' (high risk of bias) and 'Unclear' (uncertain risk of bias)

Selective outcome reporting

Description: attempts were made to assess the possibility of selective outcome reporting by investigators. Review authors' judgment: were reports of the study free of suggestion of selective outcome reporting?

Ratings: 'Yes' (low risk of bias); 'No' (high risk of bias) and 'Unclear' (uncertain risk of bias)

Other sources of bias

Was the study apparently free of other problems that could put it at a high risk of bias?
We specified a priori that the following three criteria would be assessed under the heading 'Other sources of bias':

Baseline measurement of outcome measures
Description: information on the comparability of the groups in terms of the primary outcome measures at baseline were described. Review authors' judgements: were the primary outcomes comparable between groups at baseline?
Ratings: 'Yes' (low risk of bias); 'No' (high risk of bias) and 'Unclear' (uncertain risk of bias)

Reliability of outcome measures
Description: the primary outcomes were assessed using reliable measures (Cronbach's alpha 0.6 or above). Review authors' judgements: were the primary outcomes assessed using reliable measures?
Ratings: 'Yes' (low risk of bias); 'No' (high risk of bias) and 'Unclear' (uncertain risk of bias)

Protection against contamination
Description: any measures taken to prevent or minimise the possibility that women in the control arm might receive part or all of the intervention were described so as to assess possible contamination between groups. Review authors' judgements: did the study investigators take steps to prevent or minimise contamination?
Ratings: 'Yes' (low risk of bias); 'No' (high risk of bias) and 'Unclear' (uncertain risk of bias)

Measures of treatment effect

Binary outcomes

For binary outcomes, a standardised estimation of the Odds Ratio (OR) with a 95% confidence interval was calculated. If the data to calculate the odds ratio were not reported or not available from the authors of studies, we have provided the findings as stated by the study authors.

Continuous outcomes

Continuous data were analysed where means (or mean changes) and standard deviations were available or obtainable from the authors of studies. In those instances where means and standard deviations were not available, the findings as reported by the study authors are provided. Where mean changes and standard deviations were reported but the findings were skewed (most likely because of the

small sample size), we assumed a normal distribution and analysed accordingly. The majority of the studies included in the review used a range of scales to measure similar outcomes. As such, the treatment effects for these outcomes were standardised by dividing the mean difference in post-intervention scores or change from baseline scores for the intervention and control groups by the pooled standard deviation to create the Standardised Mean Difference (SMD) with 95% confidence intervals. For the few outcomes which were assessed using the same scale, the Weighted Mean Difference (WMD) was calculated.

Dealing with missing data

Missing data and drop-out rates were assessed for each of the included studies. The table of characteristics specifies the number of participants included in the final analysis as a proportion of all participants in the study. Where available, reasons given for missing data are provided in the narrative summary. Assessment was made of the extent to which studies conformed to an intention-to-treat analysis. For dichotomous measures, best case and worst case scenario analyses were planned to estimate the effects of missing data on the results of all studies that were pooled. This meant that we were able to ascertain if observed effect sizes increased or decreased as a function of the extent of attrition in the two arms (intervention and control) of the trial. We tested four assumptions: (1) that women who dropped out of the intervention would have improved outcomes while women who dropped out of the control arm would not, (2) that women in the intervention and control groups who dropped out would both have improved outcomes, (3) that women who dropped out of the intervention would not have improved outcomes while women who dropped out of the control arm would do so, and (4) that women in the intervention and control groups who dropped out would both not have improved outcomes.

Assessment of heterogeneity

For those studies included in the meta-analysis, the consistency of results was assessed visually and by examining I^2, a quantity which describes approximately the proportion of variation in point estimates that is due to heterogeneity rather than sampling error (Higgins 2002).

Assessment of reporting biases

We planned to draw funnel plots to investigate any relationships between effect size and study precision, closely related to sample size (Egger 1997). For meaningful funnel plots, a large number of trials with a spread of sample sizes are required (Glasziou 2001; Hayashino 2005). We planned to draw funnel plots if there were at least seven trials with appropriate data. However, the small absolute number of studies that could be pooled in this review precluded the use of such plots.

Data synthesis

Where comparable data were available we planned to perform meta-analyses. The decision whether to pool data in this way was determined by the comparability of

populations and interventions (clinical heterogeneity), of the duration of follow-up (methodological heterogeneity), and of the outcomes being used in the primary studies. Where it was inappropriate to combine the data in a meta-analysis, we have presented the effect sizes and 95% confidence intervals for individual outcomes in individual studies.

Subgroup analysis and investigation of heterogeneity

Not enough studies were identified to perform subgroup analyses as planned in the protocol for this review. Methods archived for future updates appear in Table 1.

Sensitivity analysis

See Table 1.

Timeframe

Review authors intend to update this review within three years.

5 Results

5.1 DESCRIPTION OF STUDIES

Results of the search

Initial searches were run in 2006 for a much wider 'scoping' review of the intervention literature around intimate partner abuse. For this wider search, a total of approximately 17,700 records were found. One of the questions addressed in this wider review was whether women-centred interventions (advocacy, support groups, and psychological approaches) were effective in helping to improve the health and well-being of abused women and their children; 228 full papers were obtained in order to address this question, and ten randomised controlled studies, reported in 18 papers, met inclusion criteria for this review.

More focussed searches were re-run in July 2008, identifying a total of 1021 records. As a result of this search, two additional papers were acquired were obtained (both of which were subsequently excluded).

Included studies

Ten controlled randomised studies (Constantino 2005; Hyman 2001; Jouriles 2001; McFarlane 2000; McFarlane 2002; McFarlane 2006; Sullivan 1991a; Sullivan 1992, Sullivan 2002; Tiwari 2005) met the criteria for inclusion in the review. Nine out of ten studies were conducted in the USA; one study (Tiwari 2005) was conducted in Hong Kong.

Data for these ten studies were reported in 18 papers (Bybee 2005; Constantino 2005; Hyman 2001; Jouriles 2001; McDonald 2006; McFarlane 2000; McFarlane 2002; McFarlane 2004; McFarlane 2006; Sullivan 1991a; Sullivan 1991b; Sullivan 1992; Sullivan 1994a; Sullivan 1994b; Sullivan 1999; Sullivan 2002; Tan 1995; Tiwari 2005). Where studies are reported in more than one paper, henceforth only the first published paper is cited (or the paper deemed to be most relevant if published within the same year).

With the exception of one trial, published as a PhD dissertation (Hyman 2001), all of the remaining nine studies were published in peer-reviewed journals.

Recruitment

Four of the studies recruited women in health care settings (Hyman 2001; McFarlane 2000; McFarlane 2006; Tiwari 2005), four in domestic violence shelters (Constantino 2005; Jouriles 2001; Sullivan 1991a; Sullivan 1992), one primarily from domestic violence shelters but also from social and family service agencies (Sullivan 2002), and one in a District Attorney's office (McFarlane 2002). It is possible that women recruited in the health care settings may differ from those recruited elsewhere as they may not yet be at a stage where they are ready to accept help (Zink 2004). One of the studies (Sullivan 1992) recruited more participants over time. At the outset of the study, 146 women were recruited from shelters but this rose to a total of 283 reported at the two-year follow-up. However, their report of the three-year follow-up data was based on the original sample only.

The severity of the abuse experienced by participants was not always stated explicitly but mostly could be implied from either the study setting or the mean baseline abuse scores. For the five trials recruiting women either exclusively or primarily from domestic violence shelters (Constantino 2005; Jouriles 2001; Sullivan 1991a; Sullivan 1992; Sullivan 2002) it is likely that relatively severe abuse was being experienced and mean baseline abuse scores available for three of the studies support this (Sullivan 1991a; Sullivan 1992; Jouriles 2001). For the five studies recruiting participants from settings other than domestic violence shelters, the severity of the abuse was more variable. One study (McFarlane 2002), which recruited participants seeking protection orders, did not report any data on abuse severity. However, in order to obtain the orders, the women either had to present with a physical injury or a police report of the assault. In a study set in a hospital emergency department (Hyman 2001), 90% of the participants reported having been physically or sexually assaulted, 93% were experiencing ongoing abuse and 68% had received previous medical treatment for injuries. The severity of abuse experienced by participants at study entry in the three remaining trials (based either in antenatal or public health clinics) was less severe. Mean baseline scores indicated that moderately severe physical and psychological abuse was experienced by women at study entry in two of the studies (McFarlane 2000; McFarlane 2006), while in the third trial (Tiwari 2005) participants reported moderately severe psychological abuse but less severe levels of physical and sexual abuse.

Participants

A total of 1526 participants took part in the trials. Most of these women (84%) were recruited on the basis that they were experiencing current (within the last 12 months) physical or sexual abuse. Only three studies extended inclusion beyond this to also include women experiencing emotional abuse (Constantino 2005; Hyman 2001; Tiwari 2005). The majority of the participants were married or still intimately involved with the perpetrator at study entry. However, there were exceptions to this. In one study 79% of the women were no longer involved with the abusive partner (Sullivan 2002) and in another study (Jouriles 2001) the women were only recruited

if the perpetrator no longer lived in the residence. The age range of the women recruited extended from 15 to 61 years, although more usually the women were aged between 24 and 35 years. The ethnicity of the samples varied across trials, but most included a mix of whites, African Americans and Hispanics. Only two studies involved single ethnic groups, these being a study reporting on Hispanic women (McFarlane 2000) and the Hong Kong study where all the participants were Chinese (Tiwari 2005). The socioeconomic status of participants was mixed, but most of the women were on low incomes and about two-thirds to three-quarters had not attended college. Only in two studies did a reasonably high proportion of the women either have an income that was average or above average for the country (Tiwari 2005) or an education that included attending some college (Hyman 2001).

The interventions

The models of advocacy employed in the trials were heterogeneous.

Content

In the one study where abused women were seeking protection orders against their perpetrators, the main thrust of the intervention was to discuss safety issues with participants (McFarlane 2002). In the other nine trials, the content of the advocacy was more varied; in these studies the advocacy included advice on safety and accessing resources, as well as the provision of support. The theoretical framework underlying each intervention was not always stated explicitly. However, in general, the advocacy provided to the abused women participants was based on the concept of empowerment. All of the interventions were pragmatic, in that the help provided was tailored to meet the wants and needs of the individual women. One of the trials extended this by also including advocacy for the children of mothers who had been abused (Sullivan 2002), and a second study (Jouriles 2001) also provided support for the children and taught child-management skills to the mothers. One of the studies evaluated a group intervention that allowed for interaction between the participants, as well as interaction between the intervention participants and the advocate (Constantino 2005).

Advocates

One of the interventions was administered by therapists (Jouriles 2001). The remainder were administered by trained advocates, though there was some variability in their professional status. One of the interventions was led by a professional advocate (Hyman 2001), four were administered by research nurses (Constantino 2005; McFarlane 2002; McFarlane 2006; Tiwari 2005), and three of the interventions were led by trained para-professional students (Sullivan 1991a; Sullivan 1992; Sullivan 2002). The tenth study was somewhat different in that it evaluated the effectiveness of advocacy provided by a professional advocate, as well as this type of advocacy when supplemented by the services of a trained non-professional "mentor mother" who also offered advocacy support (McFarlane 2000). With one exception, all of the interventions assessed were new and non-established

modes of care within the settings in which the studies were conducted. The exception to this was a trial in an emergency room where two modes of "interventions" already in regular use were evaluated (Hyman 2001).

Duration

The duration of the interventions varied considerably and, to a large extent, this was related to the setting in which they were conducted. In general, the studies conducted outside of health care were of longer duration, both in terms of the length of the sessions and the period over which the sessions were offered. Typically, these types of interventions took place over a period of months (ranging from 8 weeks to 8 months) and provided advocacy totalling 12 hours (Constantino 2005), 23 hours (Jouriles 2001), 42 hours and a further 50 hours provided to the children (Sullivan 2002), and 60-80 hours (Sullivan 1991a; Sullivan 1992). The one study where women were recruited within a District Attorney's office provided telephone advocacy for up to eight weeks but the calls were relatively brief and totalled a mean of 72 minutes (McFarlane 2002). All of the interventions in health care settings were of relatively brief total duration. In two of the trials, short sessions of advocacy were offered over a prolonged period. In the first of these (McFarlane 2000), women were recruited in antenatal clinics and offered advocacy (or advocacy plus the services of a "mentor mother") until the time of their delivery. The authors report that most sessions lasted about 30 minutes with women having an average of four to five sessions, thereby totalling up to approximately 150 minutes (personal communication). In the second study (McFarlane 2006), a 20 minutes intervention was administered on five separate occasions, each six months apart, thereby totalling approximately 100 minutes. The remaining two interventions within health care settings were both brief one-off sessions and lasted between 20-30 minutes (Tiwari 2005), and 90 minutes (Hyman 2001).

Outcomes

In terms of our primary outcomes, eight of the ten studies measured some form of abuse, three assessed quality of life outcomes, three measured depression, and four studies measured anxiety or psychological distress. There was little consistency across the trials in relation to the scales used to measure any of these outcomes.

Six different scales (or subscales) and a single item question were employed to measure abuse. Physical violence was the form of abuse most commonly measured. When assessing this outcome, four of the trials used revised versions of the physical violence subscale of the Conflict Tactics Scale (CTS) (Jouriles 2001; Sullivan 1991a; Sullivan 1992; Tiwari 2005), two studies employed the physical abuse subscale of the Severity of Violence Against Women Scale (SVAWS) (McFarlane 2000; McFarlane 2006), and one study (Hyman 2001) used the physical abuse subscale of the Index of Spouse Abuse (ISA). Emotional abuse was assessed using two measures. Two trials (McFarlane 2000; McFarlane 2006) employed the threats of abuse subscale of the SVAWS, while the Index of Psychological Abuse (IPA) was

utilized in a further two studies (Sullivan 1992; Tiwari 2005). A single question was used to ascertain if sexual abuse had occurred in the one study (Tiwari 2005) that measured this outcome. Overall abuse was assessed by two different methods: one trial (Hyman 2001) combined the physical and non-physical abuse subscales of the ISA, while a second (Sullivan 2002) measured overall abuse by using a composite of three different scales (modified versions of the IPA, the CTS Physical Violence subscale and an unspecified 12-item injury scale). Two other aspects of abuse also were measured in one of the trials (McFarlane 2006): in this study the investigators asked about homicide risk using the Danger Assessment Scale (DAS) and harassment at work using the Employment Harassment Scale (EHS).

Quality of life was measured using two scales. One trial (Tiwari 2005) asked women to complete the SF-36 Health Survey, while two studies (Sullivan 1992; Sullivan 2002) both used an adapted version of a scale by Andrews and Withey (Andrews 1976). In terms of depression, again two different scales were employed. One study (Tiwari 2005) used a Chinese translation of the Edinburgh Postnatal Depression Scale (EPDS), while two trials (Sullivan 1992; Sullivan 2002) each measured this outcome using the Centre for Epidemiological Studies Depression Scale (CES-D). Anxiety/psychological distress was assessed using three scales. In two studies (Hyman 2001; Jouriles 2001) the participants were asked to complete the Symptoms Checklist 90-Revised Global Severity Index (SCL-90-R GSI), a third study (Constantino 2005) employed the Brief Symptom Inventory (BSI), and a fourth (Sullivan 1992) used the Rape Aftermath Symptom Test (RAST).

Follow-up

The duration of the follow-up period varied considerably between studies. Subsequent to any assessment of outcomes at the completion of an intervention, one study conducted no further follow-up of the women (Constantino 2005), and three trials carried out assessments at 10 weeks (Sullivan 1991a), 3-4 months (Hyman 2001), and 4 months (Sullivan 2002). One study (Tiwari 2005) states that outcomes were assessed at 6 weeks post delivery, but this could represent a follow-up period of anywhere between 16-34 weeks. Two studies report data at various time points up to 18 months post-intervention (McFarlane 2000; McFarlane 2002), two have multiple follow-ups for up to two years (Jouriles 2001; McFarlane 2006), and one reports data at multiple time points for up to 3 years post-intervention (Sullivan 1992).

Some of the papers reported reasons why there was a loss to follow-up. The primary reason stated was that some women could not be located (Hyman 2001; Jouriles 2001; McFarlane 2006; Sullivan 2002; Tiwari 2005). Other reasons included refusals to carry on with the study (Hyman 2001; Sullivan 2002), women returned to their abusive partner (Sullivan 1991a), difficulties with transport, childcare or living conditions (Constantino 2005), and the death of one control group woman who committed suicide (McFarlane 2002).

Excluded studies

Fifteen studies were excluded from this review, mostly on grounds of design (that is, they were not randomised controlled trials). A minority of potentially relevant studies were excluded as data were not available for the subset of women who had experienced abuse (Curry 2006; Reilly 2004). One trial was excluded as the intervention was not advocacy-based (Champion 2007). See also 'Excluded studies' for further details.

5.2 RISK OF BIAS IN INCLUDED STUDIES

We applied the eight criteria for individually randomised controlled trials outlined in the methods section above. All but two of the studies satisfied at least four of these criteria, the exceptions being two studies by McFarlane and colleagues, each of which fulfilled three (McFarlane 2000; McFarlane 2002). One study satisfied all of the criteria (Tiwari 2005).

Allocation

Sequence generation

All of the ten studies described treatment allocation as random but only three trials provided sufficient information on sequence generation (Hyman 2001; McFarlane 2006; Tiwari 2005). One study reported using random numbers tables to randomise participants (Hyman 2001) and two trials stated that they used a computer-generated method (McFarlane 2006; Tiwari 2005). The remaining seven studies either made no reference to sequence generation or provided insuffcient details.

Allocation concealment

Only two trials provided sufficient information and fulfilled the requirement of allocation concealment (Sullivan 1992; Tiwari 2005). In one study (Tiwari 2005), it was reported that a researcher not involved in the study placed the allocations in consecutively numbered sealed envelopes, and in the second study (Sullivan 1992) again sealed envelopes were used to maintain allocation concealment. Three of the trials did not have allocation concealment. In these studies, women were assigned to the condition selected in the week (McFarlane 2002; McFarlane 2006) or month (McFarlane 2000) she attended. All five of the remaining studies made no reference to allocation concealment.

Blinding

Blinding of participants or of those delivering advocacy interventions is not feasible. Two of the trials provided details of the measures taken to ensure blinded assessment of the primary outcomes. One of these studies (Hyman 2001) stated that the researchers were not provided with any information about randomisation status, while the other study (Tiwari 2005) stated that the researchers did not become aware of the women's randomisation status until after all follow-up data had been

collected and questions were being asked about the women's satisfaction with their care.

There was no blinded assessment in three of the trials. In the first of these (Sullivan 1991a) we are told that the follow-up interviews with women who received advocacy were longer as they included questions about the programme, thus the researchers must have been aware of the women's randomisation status. In the second trial (McFarlane 2002) the same researcher who administered the intervention also collected all follow-up data, and in the third trial (McFarlane 2006) we are told that budget limitations precluded the use of blinding.

The other five studies did not give any explicit information on the blinding of assessors.

Incomplete outcome data

Losses to follow-up were reported in all studies. In nine of the ten trials, losses to follow-up ranged from 1% (McFarlane 2002) to 21% (McFarlane 2000). One of the trials (Hyman 2001) lost 49% of the recruited sample and thus these results need to be interpreted with caution. Hyman reports that loss to follow-up was slightly greater in the control group but this was not statistically significant. Four of the trials (McFarlane 2000; Sullivan 1991a; Sullivan 1992) did not give sufficient details about the reasons for attrition and whether these differed as a function of the group allocation.

Selective reporting

In the review authors' judgment, there was no indication of selective outcome reporting by the study investigators. All outcome measures described in the methods also were reported in the results sections of papers. On one occasion (Constantino 2005), the information provided by the investigators was limited (e.g. only providing statistical data relating to the positive findings and reporting other outcomes as non-significant), but on request these data were provided by the study investigators.

Other potential sources of bias

Baseline measurement of outcomes

We assessed reporting of baseline measurement of outcomes in the reviewed studies. In four of these, the study investigators stated that there were no substantive between-group differences in outcome measures at baseline (Jouriles 2001; McFarlane 2000; Sullivan 1991a; Sullivan 2002), while a fifth study (Sullivan 1992) stated that there were no such differences for their larger sample but information was not provided in relation to their original sample. Five of the trials did not state specifically that there were no baseline differences between groups, but they did report means and standard deviations and these looked comparable (Constantino 2005; Hyman 2001; McFarlane 2002; McFarlane 2006; Tiwari 2005) and thus we have rated these as also fulfilling this criterion.

Reliable primary outcome measures

One study (McFarlane 2002) considered a single outcome and this was assessed using the Safety Behavior Checklist, a measure previously employed by the study authors (McFarlane 1994). They state that the measure had been tested and proven to be extremely effective, but no statistics were reported and therefore reliability was rated by us as "not clear".

All other nine studies measured multiple outcomes and often the primary outcomes were not stated explicitly, although this could sometimes be implied from the sample size calculation (Hyman 2001; Tiwari 2005) or from the research question (McFarlane 2000; Sullivan 1992). Based on this information, it was judged that all nine trials employed reliable measures to evaluate their primary outcomes. One study (Tiwari 2005) employed well-established measures that had not been evaluated for the mode of administration used, but given the high reliability associated with these measures (Conflict Tactics Scale (Straus 1988; Tang 1994), SF-36 Health Survey (Ware 1993; Lam 1998), Edinburgh Postnatal Depression Scale (Cox 1987; Lee 1998)), we still rated this trial as meeting the criterion.

Protection against contamination

Seven studies randomised the women on an individual basis. One of these (Tiwari 2005) took steps to counter possible contamination: the researchers who collected and analysed the data were not involved in the design of the analysis and were unaware of the study hypotheses; opportunity for the participants to meet were minimised; there was no record of a woman's allocation status in her medical record to influence other staff. One study (Hyman 2001) reported that there was contamination and approximately 19% women in the intervention group received control group care, while about 23% of women allocated to the control arm received the intervention. In the other five studies, where women were randomised on an individual basis (Constantino 2005; Jouriles 2001; Sullivan 1991a; Sullivan 1992; Sullivan 2002), it is possible that communication might have occurred between women in different arms of the trial and therefore we rated these as "not clear".

Three studies used a method where women were allocated according to the week (McFarlane 2002; McFarlane 2006) or month (McFarlane 2000) in which they attended either a health care facility or a District Attorney's office. In one of these (McFarlane 2006), the same health care professionals managed both groups and therefore there was potential for the control group also to receive elements of the intervention accidentally. The other two studies (McFarlane 2000, McFarlane 2002) had designs which may have minimised potential contamination in that women in the different trial arms were unlikely to come into personal contact with each other and the treatments were not provided by the same individuals.

5.3 EFFECTS OF INTERVENTIONS

Our synthesis of the outcome data is primarily narrative. A wide range of outcome measures were included across the ten studies, though some outcomes were used in several of the studies. Ultimately, however, we were only able to perform a limited number of meta-analyses because of problems with the reported data.
The first problem was that of clinical heterogeneity across the studies in relation to differences in the intensity of the advocacy interventions provided. For example, we felt that we could not combine studies that tested "intensive" interventions (i.e. 12 or more hours of advocacy) with those using "brief" interventions (e.g. less than 12 hours duration). This substantially reduced the number of studies that could be pooled.

A second problem was that a number of the outcomes were measured in different ways and thus could not be compared. For example, some studies reported a total score for an outcome, while others reported only the subscale totals of different measures. This further reduced our ability to pool studies. For the same reasons we were unable to perform planned subgroup and sensitivity analyses.

Many studies did not report effect sizes. Mean or mean change differences and confidence intervals, odds ratios and relative risks were reported in four studies (Jouriles 2001; McFarlane 2002; McFarlane 2006; Tiwari 2005) and we obtained further unpublished data after contacting the authors of five further trials (Constantino 2005, Hyman 2001, Sullivan 1992, Sullivan 2002, Tiwari 2005). In order to allow for comparison across the studies, all effects sizes were calculated independently by two of the review authors (JR, CR and/or DD). We have highlighted where these calculated effect sizes do not concur with the results reported by the study investigators. All analyses were based on post-intervention scores except for two studies (Constantino 2005; Tiwari 2005) where change from baseline data were available (these are differentiated in the forest plots by "mean change scores").

Where investigators reported multiple follow-ups within our three follow-up categories, unless stated otherwise, in all comparison analyses we chose to report the results from the latest follow-up. For example, if data were reported at 2, 6 and 12 months follow-up, we selected the data at 12 months.

Finally, one of the studies (Sullivan 1992) recruited more participants over time. For this study, where follow-up data were available for both the smaller and larger samples of participants, we calculated effect sizes based on the latter. In general, the effect sizes for outcomes at up to 12 months and 12-24 months follow-up were calculated on the larger sample of participants. The two exceptions to this both related to dichotomous measures of physical abuse and emotional abuse as

measured at up to 12 months follow-up. All effect sizes for outcomes measured at 24+ months follow-up were based on the original smaller sample of participants.

Primary outcomes

Incidence of abuse

Physical abuse
Six studies measured physical abuse; three of these evaluated brief advocacy interventions (McFarlane 2000, McFarlane 2006, Tiwari 2005) while the other three appraised intensive interventions (Jouriles 2001, Sullivan 1991a, Sullivan 1992). One study measured both severe and minor physical violence separately (Tiwari 2005), and this study was also different from the others in that mean change from baseline was assessed. Additional statistical data were obtained directly from two of the study investigators (Sullivan 1992; Tiwari 2005).

Effect sizes were calculated for two of the three studies that offered brief advocacy but these were not pooled because of the one trial that reported mean change from baseline. As indicated in (see Analysis 1.1, and Data and analyses), there was no evidence that advocacy leads to a reduction in severe physical abuse in women recruited from public health and women-and-children clinics (McFarlane 2006), either in the short-term at 12 months follow-up (SMD 0.07, 95% CI -0.15 to 0.29) or in the medium term at 24 months follow-up (SMD -0.02, 95% CI -0.24 to 0.19) (Analysis 1.1). Findings were more equivocal in the study which measured severe and minor abuse in pregnant women attending for antenatal care (Tiwari 2005). In this good quality study, a brief 30 minutes session of advocacy was not associated with any reduction in severe abuse as measured at 16-34 weeks post-intervention (change-score SMD 0.09, 95% CI -0.29 to 0.46) (Analysis 1.2) but a reduction in minor abuse was observed (change-score SMD -0.45, 95% CI -0.83 to -0.07, Analysis 1.2). The third trial that offered brief advocacy did not report any standard deviations, nor were these (or alternative relevant data) available from the authors (McFarlane 2000). However, in their paper the study authors report finding no evidence to suggest that advocacy (or advocacy plus the services of a "mentor mother") reduced physical abuse in women recruited from antenatal clinics, either in the short or medium-term.

The effectiveness of intensive advocacy was assessed in three studies that all recruited women exiting from domestic violence shelters. One study measured physical abuse using both continuous and dichotomous measures, while two trials assessed this outcome using a dichotomous measure, see (Analysis 1.3, Analysis 1.4). In the one study where a continuous measure of physical abuse was employed (Sullivan 1992), there was no evidence to confirm or refute the hypothesis that advocacy leads to a reduction in severe physical abuse at 12 months follow-up (SMD -0.11, 95% CI -0.35 to 0.13) or at 3 years follow-up (SMD 0.16, 95% CI -0.19 to 0.52). (However, at the two-year follow-up it was reported that women who received

advocacy did experience significantly less physical abuse than women in the control arm (SMD -0.24, 95% CI -0.48 to 0.00)). A similar pattern of results also emerged with the dichotomous data. Three studies contributed to a meta-analysis of the 12 months follow-up data (Jouriles 2001; Sullivan 1991a; Sullivan 1992); the point estimate favoured advocacy but the confidence intervals just crossed the line of no effect (OR 0.62, 95% CI 0.35 to 1.09). Two studies provided data for a meta-analysis of the 12-24 months follow-up data (Jouriles 2001, Sullivan 1992) and this suggests that participants who received advocacy experienced significantly less physical abuse than women in the control arm (OR 0.43, 95% CI 0.23 to 0.80). However, by three-year follow-up - when data were only available for the study by Sullivan and her colleagues (Sullivan 1992) - no benefit of advocacy was observed (OR 1.07, 95% CI 0.52 to 2.23) (Analysis 1.4).

Best case and worst case scenario analyses estimated the effects of missing data on the results of the two meta-analyses. For the 12 months follow-up data, imputing an improved outcome for women who dropped out of the study produced larger effect sizes and confidence intervals excluding no effect. When missing women in the intervention group were assumed to be no longer abused and those in the control arm were assumed to be abused: OR 0.53, 95% CI 0.30 to 0.93 (Analysis 1.5). When missing women in both intervention and control groups were assumed to be no longer abused: OR 0.55, 95% CI 0.31 to 0.97. Imputing a poor outcome for women who dropped out of the study led to a reduction in the size of the effect and wider confidence intervals including no effect. When missing women in the intervention group were assumed to be abused but those in the control arm were assumed to be no longer abused: OR 0.85, 95% CI 0.50 to 1.46. When missing women in both intervention and control groups were assumed to be abused: OR 0.82, 95% CI 0.48 to 1.41 (Analysis 1.5). A similar pattern of results emerged when the effects of missing data at 12-24 months follow-up were estimated (Analysis 1.6).

For descriptive purposes only, a forest plot outlining evidence for the effectiveness of any type of advocacy (brief or intensive) on physical abuse (as measured using a continuous measure) is given in (Analysis 1.7).

There is insufficient evidence at present to draw any unequivocal conclusions about the benefits of advocacy, either within health care settings or within the community, to reduce severe physical abuse. It is possible that intensive advocacy can reduce physical abuse one to two years after the intervention but that this effect wanes over a more protracted length of time. The primary studies are underpowered and only three could be pooled for some outcomes. The meta-analyses were still underpowered, with relatively wide confidence intervals. One high quality study suggests that brief advocacy may benefit women suffering minor abuse, but most studies did not measure minor abuse.

Sexual abuse

One study (Tiwari 2005) based in an antenatal setting evaluated the effect of receiving advocacy on subsequent sexual abuse. (Additional statistical data to those reported in the paper were obtained directly from the study investigators). Sixteen to 34 weeks post-intervention, there were no mean change differences in reported levels of sexual abuse between women who received a single 30 minute session of advocacy and those who did not (change-score SMD -0.11, 95% CI -0.49 to 0.26) (Analysis 2.1) .

Emotional abuse

Emotional abuse was measured in four studies; three studies evaluated the effectiveness of brief advocacy (McFarlane 2000; McFarlane 2006; Tiwari 2005) and a fourth evaluated an intensive intervention (Sullivan 1992). The Tiwari study again measured mean change from baseline and the additional statistical data we required were obtained directly from the study investigators.

We calculated effect sizes for two of the three studies that offered brief advocacy, but we were unable to pool the findings of these as one of the trials reported mean change from baseline and was analysed separately. A study set in public health and women-and-children clinics (McFarlane 2006), did not indicate any significant reduction in emotional abuse at 12 months post-intervention (SMD 0.09, 95% CI -0.13 to 0.31) or at 24 months follow-up (SMD -0.06 95% CI -0.28 to 0.16) (Analysis 3.1). In contrast, the antenatal-based study by Tiwari and colleagues (Tiwari 2005) reported a statistically significant reduction in emotional abuse at 16-34 weeks after the receipt of a brief one-off session of advocacy (change- score SMD -0.72, 95% CI -1.11 to -0.34), (Analysis 3.2). The third trial did not report any standard deviations, nor were these (or alternative relevant data) available from the authors (McFarlane 2000). In the published paper of this study, however, the authors report that they found no evidence that multiple brief sessions of advocacy (or advocacy plus the services of a "mentor mother") reduced emotional abuse for women recruited in an antenatal setting in the short or medium-term.

The one study that provided intensive advocacy to women exiting shelters (Sullivan 1992) did not show any significant reduction in emotional abuse at 12 months post-intervention - either when this was assessed using a continuous measure (SMD -0.03, 95% CI -0.27 to 0.21) (Analysis 3.3) or when using a dichotomous measure (OR 0.58, 95% CI 0.30 to 1.13) (Analysis 3.4). Similarly, there was no evidence of a reduction of emotional abuse as a result of receiving advocacy at 24 months follow-up (SMD -0.07, 95% CI -0.31 to 0.18) (Analysis 3.3).

A forest plot showing the effectiveness of any type of advocacy (brief or intensive) on emotional abuse (as measured using a continuous measure) (Analysis 3.5).
With the exception of the trial by Tiwari and colleagues, there is little evidence that advocacy reduces or leads to a cessation of emotional abuse. This conclusion holds

for studies conducted both within and outside of health care settings, and for studies offering either short or more intensive sessions of advocacy.

Financial abuse
No studies reported data for this outcome.

Overall abuse
Two studies reported on overall abuse (physical and emotional combined); one evaluated a brief session of advocacy for abused women attending an accident and emergency department (Hyman 2001) and one provided intensive advocacy over a 16-week period for women recruited from domestic violence shelters and social and family service agencies (Sullivan 2002). Both studies supplied additional statistical data to enable us to calculate the effect sizes. Neither study found a significant benefit from advocacy. The point estimate in the Hyman study (Analysis 4.1) favoured the intervention group but the confidence intervals included zero (SMD -0.35, 95% CI -0.90 to 0.20), while the Sullivan trial indicated a trivial benefit to the control group of women (SMD 0.03, 95% CI -0.42 to 0.48) (Analysis 4.2). The effectiveness of any type of advocacy (brief or intensive) on overall abuse is given in Analysis 4.3.

Other abuse measures

Risk of homicide and work harrassment
The risk of homicide and harassment at work were measured by one study which recruited women in health care settings (McFarlane 2006).

There was no reduction in homicide risk either in the short-term (SMD 0.03, 95% CI -0.19 to 0.25) or in the medium term (SMD -0.09, 95% CI -0.31 to 0.13) as a result of receiving a 20-minutes session of advocacy at study entry and then again at each six-monthly follow-up (up to two years) (Analysis 5.1).

The two trial arms also did not differ from each other in the degree of harassment experienced at work at 12 months follow-up (SMD 0.05, 95% CI -0.17 to 0.27), but there was a statistically significant effect at 24 months that favoured the women in the intervention group (SMD -0.36, 95% CI -0.58 to -0.14) (Analysis 6.1). This effect was not reported as significant by the study authors as they adjusted significance levels for multiple comparisons.

Psychosocial health
Six of the ten studies evaluated the effects of advocacy on the primary outcomes measures assessing psychosocial health.

Quality of life
Quality of life was assessed in three of the studies. One of the studies evaluated a brief advocacy intervention and reported mean changes from baseline for each of the

eight subscales comprising the SF-36 Health Survey measure of quality of life (Tiwari 2005), while the other two trials measured overall quality of life following an intensive advocacy intervention (Sullivan 1992; Sullivan 2002). Additional statistical data were obtained directly from the investigators of all three trials.

The Tiwari study (Tiwari 2005), where women recruited in an antenatal clinic received a one-off session of advocacy, had mixed results. Women who received advocacy reported significant improvements on three out of eight quality of life subscales as at 16-34 weeks post-intervention: physical functioning (change-score SMD 0.50, 95% CI 0.12 to 0.88), role physical (change-score SMD 0.41, 95% CI 0.03 to 0.78), and role emotional (change-score SMD 0.56, 95% CI 0.18 to 0.94). There were no between group differences on four subscales: general health (change-score SMD -0.09, 95% CI -0.47 to 0.28), vitality (change-score SMD 0.03, 95% CI -0.34 to 0.40), social functioning (change-score SMD 0.16, 95% CI -0.21 to 0.53), and mental health (change-score SMD 0.02, 95% CI -0.35 to 0.40). Women in the intervention arm fared significantly worse on the remaining bodily pain subscale (change-score SMD -0.46, 95% CI -0.83 to -0.08) (Analysis 7.1).'

The two studies conducted by Sullivan and colleagues (Sullivan 1992; Sullivan 2002) each evaluated the effectiveness of advocacy delivered over a period of 10-16 weeks for women exiting domestic violence shelters or referred from social and family service agencies. Both studies reported 12 months follow-up data and, when pooled, a higher quality of life was indicated for women in the intervention group; however, the confidence intervals included zero (WMD 0.23, 95% CI 0.00 to 0.46). Only one of these two studies followed up participants beyond 12 months (Sullivan 1992); data were obtained both at 2 years post-intervention, and again at 3 years but only for the original smaller sample of recruited women. Point estimates for effect on quality of life were positive and favoured the intervention, although again the confidence intervals spanned no difference at 2-year follow-up (WMD 0.25, 95% CI -0.02 to 0.52) and 3-year follow-up (WMD 0.30, 95% CI -0.07 to 0.67) (Analysis 7.2). NB., these findings differ from the significant effects reported by the study authors. We calculated weighted mean differences based on the reported raw means and standard deviations. The study authors reported findings based on multivariate analyses (2-year follow-up) and employed a $p<0.10$ significance level to avoid type II errors as a result of the smaller sample size (3-year follow-up).

Overall, these studies are inconclusive. Only one study evaluated whether brief advocacy improves quality of life in women who have experienced partner abuse and this had mixed findings. For advocacy provided over a period of months, the point estimates suggest that such an intervention may help abused women to attain a better quality of life both in the short and longer term. The confidence intervals spanned no effect but primarily were indicative of improved quality of life following the receipt of advocacy.

Depression

Three studies assessed the effect of advocacy on depression; one evaluated the effect of a brief intervention on post-natal depression (Tiwari 2005), and two studies appraised advocacy interventions that were intensive (Sullivan 1992; Sullivan 2002). Additional statistical data from two of the study investigators (Sullivan 1992; Tiwari 2005) were obtained by us.

In the trial by Tiwari and colleagues (Tiwari 2005), the results (Analysis 8.1) show that fewer women developed post-natal depression if they received a brief advocacy intervention in the antenatal period (OR 0.23, 95% CI 0.10 to 0.57).

For the two intensive advocacy studies (Sullivan 1992; Sullivan 2002), both assessed depression at 12 months follow-up. A meta-analysis of these data revealed no effect of intensive advocacy on depression for women exiting domestic violence shelters (WMD -0.05, 95% CI -0.19 to 0.09). NB., the authors of the Sullivan 2002 study reported this as a significant effect, based on a multivariate analysis. Only one of these two intensive advocacy studies measured depression over a longer time period (Sullivan 1992): at two years follow-up, there was no evidence that receiving advocacy was consistent with less depression among women in the intervention arm (WMD -0.08, 95% CI -0.24 to 0.08) (Analysis 8.2).

Overall, there is inconsistent evidence that advocacy has a beneficial impact on the degree of depression experienced by abused women. There is limited evidence that a one-off session of advocacy within healthcare may help pregnant abused women to suffer less post-natal depression in the months following the birth.

Anxiety/Psychological distress

Only one study measured anxiety as an outcome measure (Sullivan 1992). Three other studies measured psychological distress (Constantino 2005; Hyman 2001; Jouriles 2001) and, as this is a similar concept to anxiety, we discuss them together here. One of the four studies appraised a brief advocacy intervention, while the remaining three all evaluated the effectiveness of intensive advocacy. One of the latter studies (Constantino 2005) reported mean change from baseline and was analysed separately. Additional statistical data were obtained for two of the studies (Hyman 2001; Sullivan 1992).

For the brief intervention set in an accident and emergency department (Hyman 2001) there was evidence, at three to four months follow-up, that advocacy reduced psychological distress (SMD -0.62, 95% CI -1.18 to -0.06), see Analysis 9.1.

All three intensive interventions recruited women in domestic violence shelters. However, we were unable to pool the findings from the one trial that reported mean change from baseline. As indicated in Analysis 9.2, a meta-analysis of the pooled data from two studies (Jouriles 2001; Sullivan 1992) showed at up to 12 months follow-up there was no reduction of anxiety/psychological distress associated with

the receipt of intensive advocacy (SMD -0.16, 95% CI -0.39 to 0.06). Sullivan and her colleagues also collected data at two further time-points. On neither occasion was any statistically significant benefit evident: 24 months follow-up (SMD -0.01, 95% CI -0.25 to 0.23), 36 months (SMD -0.13, 95% CI -0.49 to 0.22). In the one study where change-from-baseline data were reported (Constantino 2005), the women were only followed up immediately post-intervention. The point estimate was consistent with decreased psychological distress in participants, but the confidence intervals spanned no effect (change-score SMD -0.69, 95% CI -1.52 to 0.14) (Analysis 9.3). NB., in the Constantino trial, the authors reported a statistically significant effect (p = 0.013) after using a non-parametric test to analyse the change from baseline data.

For descriptive purposes only, a forest plot showing the effectiveness of any type of advocacy (brief or intensive) on anxiety/psychological distress is given in Analysis 9.4.

These studies suggest that brief advocacy offered within health care settings may reduce abused women's feelings of anxiety and psychological distress in the short-term but it is not known if such a benefit would persist over time. The benefits of offering intensive advocacy to abused women in the community are unclear at present.

Secondary outcomes

Physical health

Outcomes listed in the protocol were not assessed by any of the included studies: deaths, physical injuries, chronic health disorders, general measures of physical health, and pre-term birth.

Psychosocial health

Post traumatic stress disorder

Women who received advocacy in one trial (Hyman 2001) did not significantly differ from women in the control groups on a measure of post traumatic stress disorder (SMD -0.45, 95% CI -1.00 to 0.11), see Analysis 10.1. These data were requested from the study investigator.

Perceived stress

Data from one study (Hyman 2001) suggests that women who received advocacy had lower levels of perceived stress as compared with women in the control condition (SMD -0.62, 95% CI -1.18 to -0.06), see Analysis 11.1. These data were requested from the study investigator.

Self efficacy

This outcome was measured in one study that evaluated the effectiveness of intensive advocacy for women exiting domestic violence shelters (Sullivan 1992). Additional statistical data relating to this outcome were obtained from the study invesigators. At all time points, there was evidence that women who received advocacy reported higher levels of self efficacy than women in the control arm; however, the confidence intervals were wide and included the line of no effect. The effect sizes were: 12 months follow-up SMD 0.07, 95% CI -0.17 to 0.31), 2 years SMD 0.15, 95% CI -0.09 to 0.39), and 3 years SMD 0.13, 95% CI -0.22 to 0.49) (Analysis 12.1).

Self esteem

One study (Sullivan 2002) reported a benefit in improved self esteem following advocacy (using a multivariate analysis), although our calculated effect size shows that this was a statistically non-significant improvement (SMD 0.39, 95% CI -0.06 to 0.85) (Analysis 13.1). These data were requested from the study investigator.

Social support

Social support was assessed in three of the studies and each evaluated the effect of intensive advocacy offered over a prolonged period to women recruited in or exiting domestic violence shelters or referred from social and family service agencies (Constantino 2005; Sullivan 1992; Sullivan 2002). All of these studies assessed social support using an overall measure, but one trial (Constantino 2005) also assessed four separate components of social support. This study was also different from the others in that the authors assessed mean change from baseline. Additional statistical data were obtained for all three of the studies.

Two of the trials (Sullivan 1992, Sullivan 2002) reported 12 months follow-up data that could be pooled. As indicated in the forest plot, there was no evidence to suggest that advocacy had a positive effect on social support in the short-term (WMD 0.08, 95% CI -0.16 to 0.33). Further follow-up data were only available from one of these studies (Sullivan 1992). There was a small, statistically non-significant improvement in the advocacy arm at 2 years (WMD 0.13, 95% CI -0.12 to 0.38), but by 3 years (based on the smaller original sample recruited in to the study) there was a clear beneficial effect on social support (WMD 0.39, 95% CI 0.04 to 0.74) (Analysis 14.1). Constantino and colleagues (Constantino 2005) reported finding no effect on overall social support following advocacy (using a non-parametric test), but our analysis indicates that there was a positive effect (change-score SMD 1.60, 95% CI 0.66 to 2.55) when the women were followed-up immediately post-intervention. Similarly, while the authors reported an improvement only on the "belonging" subscale, we found significant effects for all four sub-scales: "tangible" (change-score SMD 1.24, 95% CI 0.35 to 2.13), "appraisal" (change-score SMD 0.92, 95% CI 0.07 to 1.77), "self esteem" (change-score SMD 1.18, 95% CI 0.30 to 2.06), and "belonging" (change-score SMD 1.06, 95% CI 0.19 to 1.93) (see Analysis 14.2).

There is inconsistent evidence that advocacy improves social support in the short term when offered to abused women who have actively sought help. In the longer term, there may be a positive effect but this is based on the findings from one small study.

Alcohol / drug abuse, attempted suicide, self-harm
No study reported data on any of these outcomes.

Impact on relationships
Independence from the assailant
Three studies measured independence from assailant (Jouriles 2001; Sullivan 1991a; Sullivan 1992). Each of these trials recruited women in domestic violence shelters and provided weekly sessions of advocacy over a period of at least 10 weeks up to eight months. Additional statistical data were obtained for one of the studies (Sullivan 1992).

Two of the trials measured this outcome at up to 12 months follow-up (Sullivan 1991a; Sullivan 1992), and thus we were able to pool the data (Analysis 15.1). No positive short-term effect on this outcome was found (OR 1.22, 95% CI 0.74 to 2.00). A similar size of effect was also evident in the two studies that measured independence from the assailant at 12-24 months follow-up (Jouriles 2001; Sullivan 1992). Specifically, the point estimate was consistent with increased independence and thus favoured the intervention but the confidence intervals crossed the line of no effect (OR 1.40, 95% CI 0.88 to 2.24). One of the studies (Sullivan 1992) also reported independence at three years, again there was no difference between the intervention and control groups (OR 0.97, 95% CI 0.47 to 1.98) (Analysis 15.1).
The effects of missing data on the results of the two meta-analyses were estimated via best case and worst case scenario analyses. For the 12 months follow-up data, a best case scenario (imputing an improved outcome for women in the intervention group and a lack of improvement in the control arm) produced a larger effect size but the confidence intervals still included no effect. When missing women in the intervention group were assumed to be independent and those in the control arm were assumed to be non-independent: OR 1.58, 95% CI -.98 to 2.55. When missing women in both intervention and control groups were assumed to be independent: OR 1.13, 95% CI 0.71 to 1.80. When missing women in the intervention group were assumed to be non-independent but those in the control arm were assumed to be independent: OR 0.82, 95% CI 0.52 to 1.31. When missing women in both intervention and control groups were assumed to be non-independent: OR 1.13, 95% CI 0.70 to 1.82 (Analysis 15.2). A similar pattern of results emerged when the effects of missing data at 12-24 months follow-up were estimated , but on this occasion the best case scenario produced an even larger effect size and the confidence intervals excluded no effect: OR 1.81, 95% CI 1.16 to 2.84 (Analysis 15.3).

These results suggest that there is no clear evidence that the provision of intensive advocacy for women who have sought refuge in domestic violence shelters may help them eventually to become independent of their assailants.

Emotional attachment to the abuser

One study considered whether intensive advocacy offered to women exiting from domestic violence shelters had a positive effect on their emotional attachment to the perpetrator of the abuse (Sullivan 1992). Again, additional statistical data were supplied by the study investigators. As indicated in the forest plot, there was no evidence that abused women who received advocacy were any less emotionally attached than those in the control arm at either 12 months follow-up (SMD -0.08, 95% CI -0.32 to 0.16), or at 2 years (SMD 0.00, 95% CI -0.24 to 0.24). By 3 years, the point estimate was consistent with women in the intervention arm being less emotionally attached to the abuser, but the confidence intervals included zero (SMD -0.35, 95% CI -0.71 to 0.00) (Analysis 16.1).

Socio-economic measures

No study provided data on socio-economic outcome measures including including income, housing, participation in education or participation in work.

Safety behaviours

Two studies investigated the use of safety behaviours. These were both brief interventions (less than three hours total duration) but the settings were different. The first recruited women attending a district attorney's office to obtain a protection order (McFarlane 2002), and the second from health care settings (McFarlane 2006).Both reported data at 12 months post-intervention. We found a benefit associated with the receipt of advocacy (WMD 0.60, 95% CI 0.14 to 1.06) with women in the intervention arms of the trials employing more safety behaviours. This benefit was also apparent up to two years post-intervention (WMD 0.48, 95% CI 0.04 to 0.92) (Analysis 17.1). With only two studies measuring safety behaviours, we could not perform any sub-group meta-analyses based on interventions set in health service settings versus non-health service settings. Nonetheless, as the forest plots indicate, there is some suggestion that a brief advocacy intervention may only lead to a substantial and long-lasting improvement in the use of safety behaviours when the women are in fear for their safety (and so seeking protection orders). It is less clear whether the receipt of brief advocacy improves safety behaviours in abused women who are not actively seeking legal protection.

Resources

Use of resources

At protocol stage we planned to collect data on participants' use of refuges/shelters, use of counselling, calls to police, police reports filed and protection orders sought, as individual items. Data in reported papers was however assessed in the form of a

composite measure (the Community Resources Checklist) which did not permit us to report as planned. The checklist assesses if the following resources have been accessed: alcohol/drug treatments, battered women's groups, chuch/clergy, health care, legal services, police, shelters, social services, education services, and employment services. The last two of these resources were subsequently dropped from the measure by the study invesigators; therefore the findings reported below are based on two related but not identical measures.'

The use of resources was measured by two studies, one employing a dichotomous measure of the 10 items (McFarlane 2000) and one using a continuous measure of the revised 8-item version (McFarlane 2006). Both studies recruited women from health care settings and provided multiple brief sessions of advocacy over a period of months.Both studies conducted short-term (up to 12 months) and medium-term (12-24 months) follow-up. The effect sizes for the trial using a continuous measure (McFarlane 2006) are given in Analysis 18.1. There was a point estimate consistent with accessing more resources at both time points although the confidence intervals included zero: at 12 months follow-up SMD 0.22, 95% CI 0.00 to 0.44, and at 12-24 months follow-up SMD 0.15, 95% CI -0.07 to 0.37. The study employing a dichotomous measure (McFarlane 2000) did not find that advocacy increased the likelihood of resource use over and above that found in the control group of women at any follow-up point, either when advocacy was offered on its own or in combination with the services of a "mentor mother". In fact, the reverse occurred and the likelihood of accessing resources dropped below baseline levels in all groups; particularly in the control (from 32% to 17%) and advocacy (from 33% to 17%) groups, but also for the group with access to a "mentor mother" (from 23% to 21%). We were unable to calculate the effect sizes for this trial because of the baseline differences between the three groups.The results from these two trials are contradictory and we cannot draw any conclusion about the effects of advocacy in health care settings on individual resource use.

Difficulty in accessing resources

This outcome was concerned with measuring dificulties in accessing resources and was measured using a composite 11-item measure (housing, material goods and services, education, employment, health care, child care, transportation, social support, legal assistance, financial issues, and issues regarding the children). Where participants had not directly tried to access a resource, they were asked to answer how difficult they expected it would be.

This outcome was assessed by two studies (Sullivan 1991a; Sullivan 1992), the latter study providing data additional to that reported in their papers. Both studies recruited women exiting a domestic violence shelter and provided intensive weekly advocacy sessions over a period of 10 weeks. However, Sullivan 1991a did not report any means or standard deviations and these were not available from the study authors. Findings from Sullivan 1992 were mixed. There was no evidence to suggest

that abused women who received advocacy experienced fewer difficulties in accessing resources when compared with women in the control arm, either at 12 months follow-up (SMD -0.02, 95% CI -0.26 to 0.22) or at 3-year follow-up (SMD -0.20, 95% CI -0.55 to 0.15). However, at the 2-year follow-up, there was a benefit associated with receiving advocacy (SMD -0.28, 95% CI -0.52 to -0.04) (Analysis 19.1). As such, based on the findings of this one trial, at present there is insufficient evidence to indicate whether intensive advocacy does or does not decrease difficulties in accessing resources.

Maintenance of family ties

No study included in this review reported data on maintenance of family ties (i.e. children staying with mother).

Adverse events

Two participants died before completion of the studies into which they were recruited. In a study where women seeking protection orders were recruited, one woman in the control group committed suicide three weeks into the trial (McFarlane 2002) and in a study recruiting women within domestic violence shelters (Sullivan 1992), one woman in the intervention arm was murdered by her partner two weeks into the trial.

6 Discussion

6.1 SUMMARY OF MAIN RESULTS

This review identified 10 randomised controlled trials (reported in 18 papers) examining the effectiveness of advocacy interventions conducted within or outside of health care settings for women who are experiencing or have previously experienced intimate partner abuse. The studies recruited 1526 participants. The concept of empowerment was integral to the interventions, as was the belief that the help provided should be tailored to meet the wants and needs of the individual women. However, the primary studies had considerable heterogeneity in terms of the intensity of the advocacy offered (from 30 minutes up to 80 hours), the wide range of outcomes reported (22 different outcomes), the methods used to assess these outcomes (continuous or dichotomous measures), and their observed effects. The duration of follow-up also differed across studies and ranged from immediate post-intervention to three years. This heterogeneity across the studies resulted in our only being able to perform a limited number of meta-analyses. The remainder of the syntheses are in narrative form only.

Overall, we found no compelling evidence that advocacy generally reduces or leads to a cessation of abuse. Brief advocacy may have a positive effect on reducing minor physical abuse in women attending for antenatal care, but there is no evidence to suggest that such advocacy results in a reduction of more severe abuse in this or other health care settings. Similarly, the evidence is equivocal in relation to whether brief advocacy positively impacts on emotional abuse. The findings for intensive advocacy are more encouraging (at least in the short-term and in the medium-term), but here too most of the evidence is inconclusive. These trials recruited women in domestic violence shelters. In comparison to controls, women who received intensive advocacy experienced less physical and emotional abuse, but the evidence is weak; although all the point estimates were positive, all but one of the confidence intervals included the line of no effect. Intensive advocacy increased the cessation of physical abuse in women exiting shelters or refuges at 12-24 months follow-up (OR 0.23, 95% CI 0.23 to 0.80). Notably, however, There was insufficient evidence to show if advocacy reduces or leads to a cessation of other forms of abuse, including sexual abuse.

Studies measuring other primary outcomes also did not provide compelling evidence in support of advocacy. There was evidence that brief advocacy improves post-natal depression in pregnant women who were being abused, and that psychological distress may decrease when abused women attending a hospital emergency department receive a brief session of advocacy. However, these findings were based on single studies. Further, the one trial of brief advocacy that measured the effect on quality of life (using eight subscales) had mixed results. In contrast, there was some evidence that intensive advocacy may improve abused women's quality of life both in the short and longer term, but all of the confidence intervals crossed the line of no effect. There was no reduction in depression associated with intensive advocacy, nor was there any significant benefit in terms of reducing psychological distress.

In terms of the secondary outcomes, meta-analyses of two studies showed that brief advocacy leads to significantly more safety behaviours being practiced by abused women, both at 12 months and 24 months follow-up. Brief advocacy also improved perceived stress in one trial set in a hospital emergency department. Short and medium term improvements in the use of resources may also result from brief advocacy (although the confidence intervals included the line of no effect), while intensive advocacy may eventually help abused women to access resources in the medium term (although not in the short-term). The findings for social support were more equivocal; there was contradictory evidence about whether abused women report improved support following intensive advocacy. It remains unclear if advocacy can help women to remain independent of their assailants, or to stop being emotionally attached to their abuser. Similarly, while point estimates of the effect sizes for self efficacy, self esteem and post-traumatic stress disorder all suggest a benefit as a result of receiving advocacy, the confidence intervals are wide and include no effect.

Taken as a whole, we conclude that brief or intensive advocacy to abused women may improve a wide range of outcomes but these benefits are still uncertain. The positive findings of one antenatal study (Tiwari 2005) were striking in that the provision of a one-off session of advocacy led to a significant reduction in minor physical abuse, emotional abuse and post-natal depression. However, the overall findings from the ten trials were more mixed, partly reflecting the lack of power of the primary studies. Although point estimates of the effect sizes often indicated benefits associated with receipt of advocacy, the confidence intervals were wide. Unfortunately, the heterogeneity of interventions and outcomes measured across the studies precluded the pooling of many results and an estimate of the magnitude of the overall effect. Where meta-analysis was possible, we were only able to pool a maximum of three studies. For these reasons, the present findings - while potentially promising - are inconclusive.

6.2 OVERALL COMPLETENESS AND APPLICABILITY OF EVIDENCE

The studies included in this review were conducted on women recruited in a variety of settings (including four studies that were based in heath care organisations). Most of the women were recruited because they were experiencing current (within the last 12 months) physical or sexual abuse, although three studies also included women experiencing physical, sexual or emotional abuse. The majority of the participants were married or still in contact with the perpetrator at study entry. The age range of participants was wide (15-61 years). Most of the women were of lower socioeconomic status. There was ethnic diversity across the majority of the trials (whites, African Americans and Hispanics), but two studies were ethnically exclusive (Hispanic and Chinese).

From the available evidence we cannot say whether the interventions had similar effects on women experiencing different types of abuse. Many of the women recruited into the studies reported severe physical abuse, so it is possible that advocacy is acceptable to women who are at high risk of further abuse. It is not known if advocacy is acceptable to women experiencing less severe forms of intimate partner abuse. In terms of differential effects related to where a woman is in the abuse trajectory, we do not whether women actively seeking help (such as those recruited in shelters or refuges or in a criminal justice setting) might benefit more or less from advocacy than women who have just disclosed abuse, such as those recruited in a health care setting. We cannot resolve that question from the current studies. There was also little evidence available to show if advocacy interventions were any more or less effective amongst people from different ethnic groups. The one possible caveat to this arises from the study conducted in a Hong Kong antenatal clinic (Tiwari 2005) where only Chinese women were recruited. Several favourable outcomes were reported, which was surprising given that the advocacy intervention was limited to a one-off advocacy session of 30 minutes duration. However, the women were only followed-up for 16-34 weeks after the intervention, so it is not known whether the observed benefits were sustained over time.
It was not possible to determine what components or aspects of advocacy interventions were the most or the least effective as none of the included studies considered this question.

Loss to follow-up occurred in all of the studies but most of the trials retained at least 79% of their recruited sample. The one exception was the study by Hyman (Hyman 2001) where the overall attrition rate was 49%.

6.3 QUALITY OF THE EVIDENCE

The quality of one of the included studies was good (Tiwari 2005). However, most reports provided insufficient detail to confidently ascertain whether they complied with four to five of the nine quality criteria. In seven trials there were insufficient details about the method of sequence generation, and in five of the studies it was not clear if allocation concealment was maintained. Five studies did not give sufficient information on whether the outcomes measures were assessed blindly, and four did not provide full details on the completeness of their data. Seven of the studies did not discuss what steps, if any, were taken to prevent women in the control group from receiving components of the intervention. We were unable to explain differences in effect sizes for any given outcome from variation in methodological quality. Taken as a whole, we conclude that the present evidence for the effectiveness of advocacy is undermined because of difficulties in assessing the quality of nine of the ten trials in the review. Future reports of advocacy interventions should include full details on how the studies have been conducted, thereby allowing for the quality of the evidence to be determined.

6.4 POTENTIAL BIASES IN THE REVIEW PROCESS

We believe that all of the published randomised controlled trials of advocacy interventions for women experiencing partner abuse published up to the censor date were identified by the review process. We also obtained a copy of an unpublished PhD thesis that evaluated an advocacy intervention. Additional data were obtained from all study authors that we contacted. Likewise, all of the authors of studies included in the review responded to our request to inform us of any other trials that we may have missed. Other experts in this field also responded to our request asking if they knew of any additional trials. Decisions about inclusion of studies and assessment of study quality were made by two reviewers independently and data extraction was checked by a second reviewer.

6.5 AGREEMENTS AND DISAGREEMENTS WITH OTHER STUDIES OR REVIEWS

This review broadly concurs with the findings of previous reviews of advocacy interventions (Abel 2000; Hender 2001; Klevens 2004; Nelson 2004; Ramsay 2002; Ramsay 2005; Wathen 2003). However, by increasing the number of identified randomised trials and calculating effect sizes for most of the outcomes reported in the included studies, we have extended the findings of earlier reviews. On the other hand, by restricting ourselves to randomised controlled trials, we have excluded studies that were part of other reviews, which have made our findings more conservative. Previous reviews have reported the findings as outlined by the individual study authors. By calculating the effect sizes (standardised or weighted

mean differences and odds ratios) we were able to compare across studies. We have also highlighted some discrepancies between reported statistically significant results and the effect sizes calculated by us. This means that our conclusions differ in some respects from earlier reviews. Nonetheless, generally we concur that there remains a lack of good quality evidence to show if advocacy does or does not lead to a cessation or reduction in abuse, or if it improves the psychosocial health of women experiencing partner violence. Too few studies measuring the same outcomes over a reasonable period of time have been conducted to date to draw any firm conclusions.

7 Authors' conclusions

7.1 IMPLICATIONS FOR PRACTICE

Our results suggest that the potential benefits of advocacy (either offered as a brief or more intensive intervention) have not yet been fully established, including cessation or reduction of abuse, independence from assailant, improved quality of life and social support, and reductions in depression and anxiety.

We do not believe that the weakness of evidence for advocacy as an intervention for intimate partner abuse means that existing services should be withdrawn. The evidence has actually strengthened with the results of recent trials and we await the findings of new studies of advocacy in health care settings. The weakness of the current evidence base means that we cannot adequately judge their effectiveness, not that advocacy interventions are necessarily ineffective. The largely positive point estimates for most of the outcomes in all of the studies may not be a firm basis for systematically extending advocacy to health care settings, but should encourage further evaluation of advocacy's role in these settings.

7.2 IMPLICATIONS FOR RESEARCH

Further research is required to determine the effect of advocacy interventions for abused women in a number of areas. In this respect, we make the following recommendations.

First, more trials of advocacy interventions in a variety of settings are needed; and, in particular, more trials of interventions in different health care settings are required. We know that women experiencing partner violence present frequently to health services and require wide-ranging medical services (Campbell 2002; Davidson 2001) and that abused women themselves identify primary care clinicians as the people they would seek support from (Feder 2006b). However, we found only one study in an accident and emergency care setting, one based in primary care public health clinics and Women, Infants and Children (WIC) clinics, and two conducted in antenatal clinics.

Second, we need debate over which outcomes should be measured in trials of advocacy. A wide range of outcomes were examined in the studies included in this review. However, it is questionable whether all of these might be expected to change as a result of receiving advocacy. Trials need to examine a smaller range of outcomes and these should be measured using more standardised scales. This will require consensus among researchers in this field.

Third, more evidence is needed from trials where the participants are followed up for years, rather than weeks or months. Data on longer term outcomes are essential since some effects are likely to attenuate over time and others may not emerge until some time after an intervention has ended.

Fourth, trials need to test theoretically explicit interventions to determine what works (or does not work) for whom, when and in what contexts. In particular, interventions are needed that take into account the stages that abused women go through in dealing with their situation (Zink 2004). Where a woman is on the abuse trajectory - and how ready she is to change - could even be used as a stratification variable in the randomisation process.

Fifth, further work is needed to ascertain how advocacy interventions can be tailored for cultural variation between ethnic groups (Rodriguez 2006).
Finally, economic analyses are required to ascertain if the resources devoted to advocacy interventions are cost-effective in health care settings.

8 Acknowledgements

This review was peer-reviewed by three editors of the The Cochrane Developmental, Psychosocial and Learning Problems Group (including the statistics editor) and four external peer reviewers, one of whom had consumer expertise. We are grateful to the Review Group editors and staff, particularly to our Contact Editor, Professor Geraldine Macdonald, and Review Group Coordinator, Jane Dennis, for their input. We thank the included study authors who responded to our queries (Deborah Bybee, Kelly Hyman; Renee McDonald, Judith McFarlane), supplied additional data (Deborah Bybee, Rose Constantino, Kelly Hyman, Agnes Tiwari), and checked our list of included studies for omissions (Deborah Bybee, Rose Constantino, Kelly Hyman, Renee McDonald, Judith McFarlane, Agnes Tiwari). We thank Jeanne Trifone who responded to our query about whether one of her studies fulfilled our inclusion criteria. We would also like to thank members of Domus Medica, the MRC Gender & Health Unit, and other experts and colleagues for checking our list of included studies for omissions. In particular, our thanks go to: Carmen Fernandez Alonso, Rachel Jewkes, Sylvie Lo Fo Wong, Davorina Petek, Susana Sanchez, Lynne Stevens, and Steffi Winter.

9 Differences between protocol and review

In our protocol we stated that we would search the criminal justice electronic databases but ulimately this was not possible. The process of searching these databases proved unhelpful due to the use of terms with vastly different meanings in the justice disciplines (such as trial, or control).

A further difference relates to some of the outcome measures that we analysed. We included in the review four outcomes that were not mentioned in the protocol but which we subsequently decided were of interest: risk of homicide, work harrassment, independence from assailant, and emotional attachment to the abuser. Additionally, we had not anticipated that the use of resources by participants would be measured using a composite scale, rather than individual measures of the various resources available.

10 Characteristics of studies

10.1 CHARACTERISTICS OF INCLUDED STUDIES

Constantino 2005

Methods	Randomisation method: a permuted block randomisation with a 1:1 ratio Analysis by intention to treat: no Power calculation: no
Participants	Setting: domestic violence shelter Country: USA Inclusion criteria: none stated explicitly but women were first-time residents of a DV shelter Exclusion criteria: none stated Numbers recruited 30: 15 IG, 15 CG Numbers drop-outs 6: 2 IG; 4 CG Numbers analysed (and percentage of recruited) 24: 13 (87%) IG; 11 (73%) CG Age: mean 35, range 28-43 years Ethnicity: 71% white, 29% black Socioeconomic status: 58% <$10000, 17% $10-$19999, 21% $20-$29999, 4% >$30000 Education background: 12% junior high, 67% high school, 4% trade school, 17% degree
Interventions	1. A structured group social support intervention (SSI) to provide and include information on resources, time to access these, and an environment in which to chat with counsellor and friends (usual shelter care also provided); eight weekly sessions, each of 90 mins duration. 2. No treatment control (NTC): usual shelter care and unstructured chats with the principal investigator
Outcomes	Followed up immediate post-intervention only 1. Interpersonal Self Evaluation List (ISEL) - social support total score and 4 subscales (belonging, tangible, appraisal self-esteem) 2. Brief Symptom Inventory (BSI) - psychological distress
Notes	Intervention group = IG Control group = CG (Healthcare utilisation also measured but not relevant to the review)

Risk of bias table

Item	Judgement	Description
Adequate sequence	Unclear	Randomisation was done after baseline data collection using a

generation?		permuted block randomisation scheme with a ratio of 1:1. No other information was provided.
Allocation concealment?	Unclear	The medical advocate directed recruitment and retention, but there was no information about who performed the allocation or the procedure used.
Blinding?	Unclear	Blinding of participants and key personnel (person providing the intervention) was not possible. No information on blinding for outcome assessment was provided.
Incomplete outcome data addressed?	Yes	2/15 missing from intervention group; 4/15 missing from control group. Reasons given for attrition (difficulties with transportation, living conditions, child care issues) were not reported by trial arm. However, these reasons are unlikely to bias the outcomes.
Free of selective reporting?	Yes	In the paper, full statistical data were only reported for the significant findings while other outcomes were only mentioned as being near-signifcant or non-significant. These missing data were subsequently provided by the investigators.
Free of other bias?	Yes	Some participants in the control group had the opportunity to talk with the principal investigator, although not with the person delivering the advocacy intervention. This may have had an effect, but would, if anything, have diminished any positive effects.
Baseline measurement of outcome measures	Yes	No specific information on between-group differences was provided, although the means and standard deviations seemed comparable. (Study investigators calculated mean change from baseline scores).
Reliability of outcome measures	Yes	Outcome measures were reliable.
Protection against contamination	Unclear	It is possible that there might have been communication between women in different arms of the trial.

Hyman 2001

Methods	Randomisation method: a 1:1 ratio using random numbers table Analysis by intention to treat: no Power calculation: yes, but higher than expected drop-out
Participants	Setting: emergency department (ED) of level 1 trauma centre Country: USA Inclusion criteria: women aged 18+, self-identified as currently involved in an abusive relationship Exclusion criteria: could not speak English, less than a 7th grade education, unable to answer questions, intoxicated, already in shelter, experience of trauma unrelated to their abuse within the last year Numbers recruited 102: 51 IG, 51 CG Numbers drop-outs 49: 20 IG; 29 CG Numbers analysed (and percentage of recruited) 53: 31 (61%) IG; 22 (43%) CG Age: mean 31 years Ethnicity: 68% non-Caucasian, 32% Caucasian Socioeconomic status: 19% <$5000, 24% $6-$10000, 25% $11-20000, 32% >$21000 (values not discrete) Education background: 11% 7-12 grade, 39% highschool/General

	Educational Development (GED) test, 25% part college, 25% graduated college
Interventions	1. Emergency Department Victim Advocacy (EDVA) programme based on empowerment counselling (empathic support, education, safety planning, linkage with community resources, 48 hours follow-up) to enable the woman to assess her situation, help her to identify signs of danger, and to establish "back-ups" if the violence escalates; typically, the intervention lasted one-and-a-half hours 2. Women in the control group received standard Social Service care (SSSI)
Outcomes	Followed up 4-6 weeks (not analysed by author) and 3-4 months post-intervention 1. Index of Spouse Abuse (ISA) 2. Symptoms Checklist 90- Revised, Global Severity Index (SCL-90-R, GSI scale) - psychological distress 3. Impact Of Events Scale (IES) - post traumatic distress 4. Perceived Stress Scale (PSS)
Notes	Intervention group = IG Control group = CG Both EDVA and SSSI already established in the ED at the time of the evaluation Other outcomes also measured but authors states no data available by group randomisation (IG and CG): 5. Interpersonal Self Evaluation List (ISEL) - social support 6. Semi-structured Clinical Interview for DSM-IV (SCID) - general mental health 7. Safety Behaviour Checklist 8. Use of community resources 9. Relationship status 19% of IG received control group care 23% of CG received the intervention

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	Participants were randomised on a 1:1 ratio using a random numbers table.
Allocation concealment?	Unclear	No information was provided about who performed the allocation or the procedure used.
Blinding?	Yes	Blinding of participants and key personnel (person providing the intervention) was not possible. At both follow-ups the assessors were not provided with any information about randomisation status.
Incomplete outcome data addressed?	Yes	High attrition: 20/51 missing from intervention group; 29/51 missing from control group. Primary reasons given for attrition were that participants either could not be contacted or withdrew (not reported by trial arm). Initial randomisation status did not differentiate between completing and non-completing participants.
Free of selective reporting?	Yes	All measures discussed in the Methods of the thesis were also discussed in the Results, although not always in the form needed by the review authors. Where still available, such data were

		subsequently provided by the investigator.
Free of other bias?	Unclear	Some of the participants in the intervention arm did not receive advocacy and vice versa, although this would, if anything, have diminished any positive effects. Refusal to participate was also high.
Baseline measurement of outcome measures	Yes	No specific information on between-group differences was provided, although the means and standard deviations seemed comparable.
Reliability of outcome measures	Yes	Outcome measures with useable data were reliable.
Protection against contamination	No	19% of women in the intervention arm of the trial only received "usual care", and 23% of women in the control group received the intervention.

Jouriles 2001

Methods	Randomisation method: none stated Analysis by intention to treat: no Power calculation: no
Participants	Setting: community - working in the family's home (recruited in shelter) Country: USA Inclusion criteria: mothers physically abused by male partner in last 12 months, at least one child aged 4-9 years living with them who had conduct problems, abusive partner not a member of the household, residence within 50 miles of the shelter, residence safe enough for staff to visit Exclusion criteria: mothers or child exhibited symptoms of serious mental illness Numbers recruited 36: 18 IG, 18 CG Numbers drop-outs 6: 5 IG; 1 CG Numbers analysed (and percentage of recruited) 30: 13 (72%) IG; 17 (94%) CG Age: mean 28 years Ethnicity: 31% African American, 28% Caucasian, 33% Latino, 8% other Socioeconomic status: 89% received public assistance year prior to shelter residence, mean preshelter income $7500 Education background: mean 11 years of education
Interventions	1. Project SUPPORT to provide mothers and chilldren with social, emotional and instrumental support, and to teach child management skills to the mothers; the support component included helping women during their transition from the shelter and help to obtain the physical resources and social supports to become self-supporting; weekly sessions lasting 1-1.5 hours over 8 months but weekly attendance not a requirement (mean contact 23 hours) 2. Women in the control group received monthly contact (in person or by phone) and were encouraged to use existing community or shelter services; no clinical services provided except where there were immediate safety concerns
Outcomes	Followed up mid-way intervention, immediate post-intervention, 4, 8, 24 months post-intervention 1. Conflict Tactics Scale (CTS), Physical Violence subscale - recurrence of physical abuse 2. Return to assailant (single question)

	3. Psychological distress (SCL-90-R)
Notes	Intervention group = IG Control group = CG (Child-related measures not included in this review)

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Unclear	"Families were randomly assigned". No other information was provided.
Allocation concealment?	Unclear	No information was provided.
Blinding?	Unclear	Blinding of participants and key personnel (person providing the intervention) was not possible. No information was provided in relation to the blinding of the outcome assessor(s).
Incomplete outcome data addressed?	Unclear	5/18 missing from intervention group; 1/18 missing from control group. Reasons given for attrition were not discussed. It is possible that more participants withdrew from the intervention arm because they were receiving the intervention.
Free of selective reporting?	Yes	All measures discussed in the Methods of the paper were also discussed in the Results.
Free of other bias?	Yes	No obvious problems of other bias.
Baseline measurement of outcome measures	Yes	The investigators state that the groups did not differ on any of the outcome variables.
Reliability of outcome measures	Yes	Outcome measures relevant to the review were reliable.
Protection against contamination	Unclear	It is possible that there might have been communication between women in different arms of the trial.

McFarlane 2000

Methods	Randomisation method: randomly determined the specific intervention into which each clinic would enter women in the first month of the trial, each clinic rotating through a specified sequence of three interventions, entering all participants for a given month into the same intervention Analysis by intention to treat: no Power calculation: yes
Participants	Setting: 2 antenatal clinics Country: USA Inclusion criteria: women physically or sexually abused by current or former male partner in year prior to or during pregnancy Exclusion criteria: none stated Numbers recruited 329: 118 "outreach", 98 "counselling", 113 "brief" Numbers drop-outs 70: 26 "outreach", 25 "counselling", 19 "brief" Numbers analysed (and percentage of recruited) 259: 92 (78%) "outreach", 73 (74%) "counselling"; 94 (83%) "brief" Age: mean 24 years, range 15-42 years

	Ethnicity: 100% Hispanic Socioeconomic status: 23% employed, 53% financially supported themselves; 66% <$10,000, 6% >$20,000 Education background: mean 8 years of education
Interventions	Three intervention groups: 1. "counselling" - unlimited access during clinic opening times to onsite bilingual DV advocate offering support, education, referral, assistance in accessing resources; available by appointment or drop-in for the duration of pregnancy 2. "outreach" - as "counselling", plus the services of a bilingual trained non-professional mentor mother offering support, education, referral, assistance in accessing resources; achieved through personal visits and telephone contact 3. "brief" - women offered wallet-sized card with information on community resources and a brochure
Outcomes	Followed up 2, 6, 12, 18 months post-intervention (also at 24 months, but no analyses) 1. Severity of Violence Against Women Scale (SVAWS) - threats and actual physical abuse 2. Community Resource Assessment
Notes	The "outreach" and "counselling" interventions are equivalent to other forms of intervention reported in this review. The "brief" intervention is equivalent to the control group care provided in other trials reported in this review

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Unclear	".... initiated by randomly determining the specific intervention into which each clinic would enter during the first month of the study .... each clinic then rotated through a specified sequence of the three interventions, entering all participants for a given month into the same intervention." Additionally, the investigators state " the procedure .... did not involve individually randomizing women using a technique such as a random numbers table or computer generated random numbers." No information on the technique actully used was provided.
Allocation concealment?	No	It is possible that key personnel could have foreseen the assignments.
Blinding?	Unclear	Blinding of participants and key personnel (person providing the intervention) was not possible. No information was provided in relation to the blinding of the outcome assessor(s).
Incomplete outcome data addressed?	Unclear	26/118 missing from "outreach" intervention group, 25/98 missing from "counselling" intervention group, 19/113 missing from "brief" control group. Reasons given for attrition were not discussed but two analyses conducted to estimate any effects due to loss of follow-up showed no signifcant differences among the groups.
Free of selective reporting?	Yes	Both measures discussed in the Methods of the paper were also discussed in the Results.
Free of other bias?	Unclear	The investigators state that recall bias may have resulted from an interruption in funding that delayed the completion of some of the

		follow-up interviews.
Baseline measurement of outcome measures	Yes	The investigators state that the groups did not differ on any of the outcome variables.
Reliability of outcome measures	Yes	The primary outcome (physical and emotional abuse) was reliable. No data were provided on the reliability of the scale used to measure the use of community resources.
Protection against contamination	Unclear	Not addressed explicitly, although the study design may have minimised potential contamination as women in the different arms of the trial were unlikley to meet, and the treatments were not provided by the same persons.

McFarlane 2002

Methods	Randomisation method: systematic allocation of women to either the treatment or control group, depending on week of enrolment Analysis by intention to treat: no Power calculation: yes
Participants	Setting: family-violence unit of a large urban district attorney's (DA) office Country: USA Inclusion criteria: English- or Spanish-speaking women applying and qualifying for a civil protection order (CPO) against an intimate partner Exclusion criteria: none stated Numbers recruited 150: 75 IG, 75 CG Numbers drop-outs 1: 0 IG; 1 CG Numbers analysed (and percentage of recruited) 149: 75 (100%) IG; 74 (99%) CG Age: means 30 years IG, 35 years CG Ethnicity: 31% African American, 25% White, 44% Latino IG; 35% African American, 28% White, 37% Latino CG Socioeconomic status: not stated Education background: mean 11 years of education IG, mean 12 years of education CG
Interventions	1. Usual services of DA office (see below), then women given 15-item safety checklist and phoned six times by advocates (research nurses) over an 8-week period to discuss safety promoting behaviours 2. Women in the control group received usual DA services: an office hours service that processes CPOs, offers advocacy and referrals (including safety plans, resource information, encourages contact with a caseworker who provides 1 hour of advocacy and referrals session with follow-up activities as needed)
Outcomes	Followed up 3, 6, 12, 18 months post intervention 1. Safety Behaviors Checklist
Notes	Intervention group = IG Control group = CG

Risk of bias table

Item	Judgement	Description

Adequate sequence generation?	Unclear	"We systematically allocated women to either the treatment group or the control group, depending on the week of enrollment in the study (systematic allocation to groups by week of enrollment is unlikely to introduce any sampling bias)." No further information was provided.
Allocation concealment?	No	It is possible that key personnel could have foreseen the assignments.
Blinding?	No	Blinding of participants and key personnel (persons providing the intervention) was not possible. The outcome assessors also provided the intervention, hence assessment also was not blinded.
Incomplete outcome data addressed?	Yes	Minimal attrition. 0/75 missing from intervention group, 1/75 missing from control group. Reason given for attrition was the suicide of one participant early in the trial.
Free of selective reporting?	Yes	Only one outcome.
Free of other bias?	Unclear	Having the same person acting as the interventionist and outcome assessor may have led to detection bias.
Baseline measurement of outcome measures	Yes	No specific information on between-group differences was provided, although the means and standard deviations seemed comparable.
Reliability of outcome measures	Unclear	The investigators state that the measure had been used previously and proven to be effective. However, no statistical information on this was provided.
Protection against contamination	Unclear	Not addressed explicitly, although the study design may have minimised potential contamination as women in the different arms of the trial were unlikley to meet, and the treatments were not provided by the same persons.

McFarlane 2006

Methods	Randomisation method: allocated by week of recruitment Analysis by intention to treat: no Power calculation: yes
Participants	Setting: recruited in 2 primary care public health clinics and 2 Women, Infants, & Children clinics (WICs) Country: USA Inclusion criteria: women aged 18-44 yrs, English or Spanish speaking, identified by nurse as physically or sexually abused by an intimate partner within last 12 months Exclusion criteria: none stated Numbers recruited 360: 180 IG, 180 CG Numbers drop-outs 41: 19 IG; 22 CG Numbers analysed (and percentage of recruited) 319: 161 (89%) IG; 158 (88%) CG Age: mean 30 years IG, mean 31 years CG Ethnicity: 12% White, 28% Black, 60% Hispanic, 1% other Socioeconomic status: 32% <$5000, 21% $5-$10000, 31% $10-$20000, 17% > $20000 Education background: 49% < highschool 29% highschool graduate, 22% > highschool

Interventions	1. Nurse case management empowering abused women by increasing independence / control: focus on protection / safety, enhanced choice-making/problem solving; nurse facilitates this by giving anticipatory guidance and guided referrals tailored to woman's individual needs; sessions lasted for 20 minutes, on average, and were provided at baseline and at 6-monthly intervals for 2 years 2. Control group care was the provision of a referral card listing a safety plan and sources for IPV services; no counselling, education, referrals or other services were offered
Outcomes	Followed up 6, 12, 18 and 24 months 1. Severity of Violence Against Women Scale (SVAWS) - threats and actual physical abuse 2. Danger Assessment Scale (DAS) - homicide risk 3. Employment Harassment Scale (EHS) - harassment at work 4. Community Resource Assessment 5. Saftey Behavior Checklist
Notes	Intervention group = IG Control group = CG

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	".... each week of the study was randomized by a computer-generated process so that each woman consenting would be assigned to an intervention group based on the week in which she was assessed for abuse."
Allocation concealment?	No	The randomisation was completed by the project manager and presented to the research nurses responsible for recruitment at the begining of each week.
Blinding?	No	Blinding of participants and key personnel (persons providing the intervention) was not possible. The outcome assessors also provided the intervention, hence assessment also was not blinded.
Incomplete outcome data addressed?	Yes	19/180 missing from intervention group, 22/180 missing from control group. Reason given for attrition was that the participants could not be contacted. There was no differnce in trial arm.
Free of selective reporting?	Yes	All measures discussed in the Methods of the paper were also discussed in the Results.
Free of other bias?	Unclear	The research nurses providing the intervention also had to provide care for the control group, so there was a possibily of performance bias - although this would, if anything, have diminished any positive effects of the intervention. However, having the same person acting as the interventionist and outcome assessor may have led to detection bias.
Baseline measurement of outcome measures	Yes	No specific information on between-group differences was provided, although the means and standard deviations seemed comparable.
Reliability of outcome measures	Yes	Four of the outcomes (including the primary outcomes of abuse) were reliable. No data were provided on the reliability of the scale used to measure the use of community resources.

Protection against contamination	No	The same health care professionals managed both women in the intervention and the control arms of the trial.

Sullivan 1991a

Methods	Randomisation method: random allocation with ratio of 2:1 (intervention : control), no stratification Analysis by intention to treat: no Power calculation: no
Participants	Setting: community (recruited in shelter) Country: USA Inclusion criteria: abused women living in a refuge and intending to leave their assailants Exclusion criteria: women who left the refuge quickly without completing exit form or telling anyone where they were going, returned immediately to assailants, left the area, spoke no English Numbers recruited 46: 30 IG, 16 CG Numbers drop-outs 5: 5 IG; 0 CG Numbers analysed (and percentage of recruited) 41: 25 (83%) IG; 16 (100%) CG Age: mean 28 years, range 19-39 years Ethnicity: 56% white, 39% African American, 5% Hispanic Socioeconomic status: 63% unemployed, 71% receiving some government aid Education background: 59% educated to highschool level or less
Interventions	1. Intensive one-on-one services with a trained paraprofessional advocate who assisted women in accessing needed community resources within one week of leaving the shelter; ten weeks of advocacy, usually meeting twice a week: 4-6 hours hours in person and another 2 hours telephone contact 2. Women in the control group received standard shelter care and no additional post-shelter service
Outcomes	Followed up mid-way intervention, immediate post-intervention, 10 weeks post-intervention 1. Conflicts Tactics Scale (CTS), Violence subscale (modified) - experience/extent of abuse 2. Effectiveness in Obtaining Resources (EOR) scale 3. Independence from assailant (one question about current relationship)
Notes	Intervention group = IG Control group = CG

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Unclear	"... women were randomly assigned to either of the two conditions, stratifying for order. Two thirds were randomly asssigned to the [intervention], and one third to the control condition." No further information was provided.
Allocation concealment?	Unclear	No information was provided about who performed the allocation or the procedure used.
Blinding?	No	Blinding of participants and key personnel (persons providing the

		intervention) was not possible. The outcome assessors also were not blinded as at data collection they had to ask intervention group participants what they thought about the advocacy process.
Incomplete outcome data addressed?	Unclear	5/30 missing from intervention group, 0/16 missing from control group. Reason given for attrition was that 5 participants were no longer "eligible", as they had to receive at least 3 weeks of services and had dropped out (3 of these because they had returned to their assailants).
Free of selective reporting?	Yes	All measures discussed in the Methods of the paper were also discussed in the Results.
Free of other bias?	Yes	No obvious problems of other bias.
Baseline measurement of outcome measures	Yes	The investigators state that the groups did not differ on severity of abuse; effectiveness in accessing resources was not measured at baseline.
Reliability of outcome measures	Yes	Outcome measures were reliable.
Protection against contamination	Unclear	It is possible that there might have been communication between women in different arms of the trial.

Sullivan 1992

Methods	Randomisation method: only states "sealed envelopes" Analysis by intention to treat: no Power calculation: no
Participants	Setting: community (recruited in shelter) Country: USA Inclusion criteria: abused women who stayed at least one night in shelter and intended to stay in area for at least 3 months post-shelter Exclusion criteria: none stated ALL DATA BELOW BASED ON ORIGINAL SAMPLE OF WOMEN (see notes) Numbers recruited 146: 76 IG, 70 CG Numbers drop-outs 22: 14 IG; 8 CG Numbers analysed (and percentage of recruited) 124: 62 (82%) IG; 62 (89%) CG Age: mean 28 years, range 17-61 years Ethnicity: 42%African American, 46% White, 7% Latina, 2% Asian American, 3% other Socioeconomic status: 61% unemployed, 81% receive government aid Education background: 64% educated to high school level, 34% some college education
Interventions	1. Intensive one-on-one services with an advocate who assisted women to devise a safety plan and access community resources; ten weeks of advocacy, usually meeting twice a week: mean 7 hours contact per week for 10 weeks after leaving shelter 2. Women in the control group received standard shelter services provided to all residents, and then usual after-shelter care (if any)
Outcomes	Followed up immediate post-intervention, and 6, 12, 18, 24, 36 months post-intervention (N.B. outcomes 2 and 5 not followed up beyond 2 years) 1. Conflicts Tactics Scale (CTS), Violence subscale (modified)

	2. Index of Psychological Abuse (IPA) 3. Quality of life (adapted from measure by Andrews and Withey, 1976) 4. The Adult's Social Support Questionnaire 5. Centre for Epidemiological Studies - Depression scale (CES-D) 6. Rape Aftermath Symptom Test (RAST) - long-term fear and anxiety 7. Effectiveness in obtaining resources (EOR) (author's own scale), later changed to difficulties in obtaining resources (DOR) 8. Independence from assailant (one question about current relationship) 9. Self efficacy (authors' own scale) 10. Emotional attachment to assailant (author's own scale)
Notes	Intervention group = IG Control group = CG 1992, 1994 and 2005 papers report on original sample recruited; but more women joined over time and 1999 paper reports on a larger sample (the paper states 284, but personal communication with the investigators verifies this to be 283); participants' characteristics were similar to those of original sample The majority of the effect sizes calculated for follow-up at up to 12 months and 12-24 months follow-up are based on the larger sample size Locus of control was measured at baseline and at 6 months follow-up, but then dropped; no data were available

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Unclear	"Group selection was random, stratifying for order and for whether or not a woman was romantically involved with her assailant." No further information was provided.
Allocation concealment?	Yes	"The interviewer opened a sealed envelope which indicated whether the woman would receive the services of an advocate. The interviewer did not know to which group a woman would be assigned until after the interview was completed ...."
Blinding?	Unclear	Blinding of participants and key personnel (persons providing the intervention) was not possible. The outcome assessors were different to the persons providing the intervention and they were separately trained - but no other information provided.
Incomplete outcome data addressed?	Unclear	14/76 missing from intervention group, 8/70 missing from control group in the original sample. Reasons given for attrition: five participants in the intervention arm were no longer "eligible" as they had to receive at least 3 weeks of services (four dropped out and returned to their assailants and one woman was murdered); the remainder (in either group) could not be located.
Free of selective reporting?	Yes	All measures discussed in the Methods of the paper were also discussed in the Results, although not always in the form needed by the review authors. Where still available, such data were subsequently provided by the investigators.
Free of other bias?	Yes	No obvious problems of other bias.
Baseline measurement of outcome	Yes	Baseline measures taken. No further information provided for the original sample but for the the larger sample the investigators stated there were no statistical differences for the five main

measures		outcome variables.
Reliability of outcome measures	Yes	Outcome measures were reliable.
Protection against contamination	Unclear	It is possible that there might have been communication between women in different arms of the trial.

Sullivan 2002

Methods	Randomisation method: none stated Analysis by intention to treat: no Power calculation: none stated
Participants	Setting: community - working in the family's home (recruited in shelter) Country: USA Inclusion criteria: physical violence from an intimate partner or ex-partner in prior 4 months, intended to stay in area for 8 months, at least one child between 7-11 living with them and at least one of these required to participate Exclusion criteria: none stated Numbers recruited 80: 45 IG, 35 CG Numbers drop-outs 4, not stated by trial arm Numbers analysed (and percentage of recruited) 78 (98%) as some data imputed: 45 IG; 33 CG Age: mean 31 years Ethnicity: 49% non-Hispanic white, 39%African American, 5% Hispanic/ Latina, 5% multiracial, 1% Asian, 1% Native American Socioeconomic status: mean income $1200 per month, 88% receiving government aid, 44% employed Education background: none stated
Interventions	1. Advocacy to improve the well-being of mothers and self-confidence of their children, and to protect against continued violence; three components: (a) advocacy to help mothers generate, mobilise, and access community resources; (b) similar advocacy for the children; (c) children attended a 10-week support and education group; intervention based on individual needs of mother and child, full programme lasted 16 weeks, families saw advocates for a median 8 hours p.w., averaging 5 hours with children and an additional 3 hours with the women 2. Women in control group had usual access to services available to community residents
Outcomes	Followed up immediate and 4 months post-intervention 1. Overall abuse - composite of (a) shortened Index of Psychological Abuse (IPA), (b) Conflict Tactics Scale (CTS) modified Physical Violence subscale, and (c) injury 2. Centre for Epidemiological Studies - Depression scale (CES-D) 3. Rosenberg Self Esteem Inventory (RSEI) 4. Quality of life (adapted from measure by Andrews and Withey, 1976) 5. The Adult's Social Support Questionnaire
Notes	Intervention group = IG Control group = CG Breakdown of numbers recruited: personal communication (Child-related measures not included in this review)

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Unclear	".... women were randomly assigned to either the experimental or the control condition." No other information was provided.
Allocation concealment?	Unclear	No information was provided.
Blinding?	Unclear	Blinding of participants and key personnel (persons providing the intervention) was not possible. No information was provided in relation to the outcome assessors.
Incomplete outcome data addressed?	Yes	Four participants dropped out, not stated by trial arm. However, where possible, missing data were imputed resulting in 0/45 "missing" from intervention group, 2/35 "missing" from control group. Reasons given for attrition were that 2 women declined further involvement and 2 could not be located (not reported by trial arm).
Free of selective reporting?	Yes	All measures discussed in the Methods of the paper were also discussed in the Results, although not always in the form needed by the review authors. Such data were subsequently provided to us by the study investigators.
Free of other bias?	Yes	No obvious problems of other bias.
Baseline measurement of outcome measures	Yes	The investigators state that the groups did not differ on any of the outcome variables.
Reliability of outcome measures	Yes	Outcome measures were reliable.
Protection against contamination	Unclear	It is possible that there might have been communication between women in different arms of the trial.

Tiwari 2005

Methods	Randomisation method: generated by computer and concealed in consecutively numbered sealed envelopes by a researcher not involved in the study Analysis by intention to treat: yes Power calculation: yes
Participants	Setting: public hospital antenatal clinic Country: Hong Kong Inclusion criteria: pregnant women aged 18+ yrs, <30 weeks gestation, attending first antenatal appointment, identified as abused by an intimate partner within last 12 months Exclusion criteria: abuser was not a male partner Numbers recruited 110: 55 IG, 55 CG Numbers drop-outs 4: 4 IG; 0 CG Numbers analysed (and percentage of recruited) 106: 51 (93%) IG; 55 (100%) CG Age: mean 30 years IG, mean 31 years CG Ethnicity: all Chinese Socioeconomic status: 13% <$10000, 28% $10-$20000, 55% >S20000 IG;

	19% <$10000, 39% $10-$20000, 37% >S20000 CG Education background: none stated
Interventions	1. Intervention based on empowerment to enhance abused women's independence and control, consisted of advice in the areas of safety, choice making and problem solving, and helped women to positively value themselves; intervention delivered by a senior researcher (a midwife with a degree in counselling) and lasted about 30 minutes, an information brochure also provided 2. Women in the control group received standard care: a wallet-sized card with information on community resources for abused women, which included shelter hotlines, law enforcement, social services and non-government organisations
Outcomes	Followed up 6 weeks post delivery (so, depending on gestation age at recruitment, about 16-34 weeks post intervention) 1. Conflicts Tactics Scale (CTS) modified and translated version of Form-R (3 subscales - Physical Violence, Verbal Aggression, Reasononing) and one extra item on sexual abuse 2. Short-form 36 (SF-36) - quality of life (Chinese version) 3. Edinburgh Postnatal Depression Scale (EPDS) (Chinese version)
Notes	Intervention group = IG Control group = CG Average national income: HK$11000

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	The allocation schedule was computer-generated.
Allocation concealment?	Yes	Allocation was concealed by the use of consecutively numbered sealed envelopes, a researcher not involved in the study carried out this task.
Blinding?	Yes	Blinding of participants and key personnel (persons providing the intervention) was not possible. The outcome assessors were blinded to the study design/hypotheses and group allocation. The blinding appeared to be successful: questions on satisfaction with the care received was not asked about until all outcome data were collected, no participant revealed their randomisation status early.
Incomplete outcome data addressed?	Yes	4/55 missing from intervention group, 0/55 missing from control group. Reason given for attrition was that the participants could not be traced.
Free of selective reporting?	Yes	All measures discussed in the Methods of the paper were also discussed in the Results.
Free of other bias?	Yes	Active steps were taken to minimise bias: the person administering the intervention was separated from all control group participants, clinic waiting times were minimised to reduce the chance of intervention and control groups meeting, allocation status was not recorded in the medical record.
Baseline measurement of	Yes	No specific information on between-group differences was provided, although the means and standard deviations seemed comparable.

outcome measures		(Study investigators calculated mean change from baseline scores).
Reliability of outcome measures	Yes	Outcome measures were reliable.
Protection against contamination	Yes	The study investigators took steps to counter contamination: data was collected and analysed by persons not involved in the design of the trial, opportunities for women in the two arms to meet were minimised, group allocation status was not recorded in the medical record.

10.2 CHARACTERISTICS OF EXCLUDED STUDIES

Bell 2001

Reason for exclusion	Not a randomised controlled trial (before/after, matched parallel groups)

Casey 2007

Reason for exclusion	Not a randomised controlled trial (before/after study with historical controls)

Champion 2007

Reason for exclusion	Not an advocacy intervention Secondary analysis of data from a RCT: comparing outcomes for abused women with non-abused women

Curry 2006

Reason for exclusion	RCT but no separate data for the abused subset of women

Harris 2002

Reason for exclusion	Not a randomised controlled trial (observational study)

Kelly 1999

Reason for exclusion	Not a randomised controlled trial (before/after study with historical controls)

Krasnoff 2002

Reason for exclusion	Not a randomised controlled trial (observational study)

McFarlane 1997

Reason for exclusion	Not a randomised controlled trial (before/after study, women acted as own controls)

McKean 2004

Reason for exclusion	Not a randomised controlled trial (matched parallel groups)

Morrissey 2005

Reason for exclusion	Not a randomised controlled trial (unmatched parallel groups)

Muelleman 1999

Reason for exclusion	Not a randomised controlled trial (before/after study with historical controls)

Parker 1999

Reason for exclusion	Not a randomised controlled trial (matched parallel groups)

Reilly 2004

Reason for exclusion	Not a randomised controlled trial (before/after study with historical controls) No separate data for the abused subset of women Outcomes not relevant to review

Trifone 1994

Reason for exclusion	Not a randomised controlled trial (observational study)

Tutty 1996

Reason for exclusion	Not a randomised controlled trial (before/after study, women acted as own controls)

11 Additional tables

11.1 ADDITIONAL METHODS FOR FUTURE UPDATES

Issue	Method
Subgroup analyses and investigation of heterogeneity	We plan to perform sugbroup analyses for the following: single component interventions versus multi-component interventions, and interventions set in health service settings versus non-health care settings. Theoretical justification for subgroup analyses: (i) Domestic violence activists and service providers argue that the effectiveness of advocacy is enhanced by integration of advocacy services into a coordinated community response, including criminal justice agencies, refuges/shelters, welfare support, and health health services. (Feder 2006). This strategy, based on the 'Duluth' model, is a network of agreements, processes and applied principles created by the local shelter movement, criminal justice agencies, health care and human service programmes (Clapp 2000). The proposed sub-group analysis will test whether the (potential) effectiveness of advocacy is enhanced (or diminished) by other interventions in the context of a coordinated community response. It is theoretically plausible that even in the absence of a full community coordinated response, an additional intervention combined with advocacy will have a synergistic effect and therefore we will include studies that test a combined intervention, as long as the control group is also exposed to the additional intervention; (ii) If domestic violence advocacy is an effective intervention overall, policy makers and service commissioners need to know if this effect is moderated by the setting in which it is delivered. For example, if a health care setting enhanced the effect, then this would be an appropriate context for commissioning advocacy.
Sensitivity analyses	To assess the robustness of conclusions to quality of data and approaches to analysis, sensitivity analyses are planned to investigate the effects of study quality, differential drop-out, intention to treat, and duration of follow-up.

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14 Data and analyses

Comparison 1. Physical abuse

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.1 Brief advocacy	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
1.1.1 "severe" up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
1.1.2 "severe" 12-24 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
1.2 Brief advocacy (mean change)	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
1.2.1 "severe" up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
1.2.2 "minor" up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
1.3 Intensive advocacy	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
1.3.1 "severe" up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
1.3.2 "severe" 12-24 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
1.3.3 "severe" 24+ mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
1.4 Intensive advocacy	3		Odds Ratio (M-H, Fixed, 95% CI)	Subtotals only
1.4.1 Up to 12 mths FU	3	215	Odds Ratio (M-H, Fixed, 95% CI)	0.62 [0.35, 1.09]
1.4.2 12-24 mths FU	2	295	Odds Ratio (M-H, Fixed, 95% CI)	0.43 [0.23, 0.80]
1.4.3 24+ mths FU	1	124	Odds Ratio (M-H, Fixed, 95% CI)	1.07 [0.52, 2.23]
1.5 Intensive advocacy: missing reassigned (up to 12 mths FU)	3		Odds Ratio (M-H, Fixed, 95% CI)	Subtotals only
1.5.1 missing IG not abused, CG abused	3	228	Odds Ratio (M-H, Fixed, 95% CI)	0.53 [0.30, 0.93]
1.5.2 missing IG and CG all not abused	3	228	Odds Ratio (M-H, Fixed, 95% CI)	0.55 [0.31, 0.97]
1.5.3 missing IG abused, CG not abused	3	228	Odds Ratio (M-H, Fixed, 95% CI)	0.85 [0.50, 1.46]
1.5.4 missing IG and CG all abused	3	228	Odds Ratio (M-H, Fixed, 95% CI)	0.82 [0.48, 1.41]

1.6 Intensive advocacy: missing reassigned (12-24 mths FU)	2		Odds Ratio (M-H, Fixed, 95% CI)	Subtotals only
1.6.1 missing IG not abused, CG abused	2	320	Odds Ratio (M-H, Fixed, 95% CI)	0.30 [0.16, 0.54]
1.6.2 missing IG and CG all not abused	2	320	Odds Ratio (M-H, Fixed, 95% CI)	0.54 [0.32, 0.92]
1.6.3 missing IG abused, CG not abused	2	320	Odds Ratio (M-H, Fixed, 95% CI)	0.85 [0.50, 1.44]
1.6.4 missing IG and CG all abused	2	320	Odds Ratio (M-H, Fixed, 95% CI)	0.49 [0.27, 0.88]
1.7 Any advocacy	2		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
1.7.1 "severe" up to 12 mths FU	2		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
1.7.2 "severe" 12-24 mths FU	2		Std. Mean Difference (IV, Fixed, 95% CI)	No totals

Comparison 2. Sexual abuse

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
2.1 Brief advocacy (mean change)	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
2.1.1 Up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals

Comparison 3. Emotional abuse

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
3.1 Brief advocacy	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
3.1.1 Up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
3.1.2 12-24 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
3.2 Brief advocacy (mean change)	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
3.2.1 Up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
3.3 Intensive advocacy	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
3.3.1 Up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
3.3.2 12-24 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
3.4 Intensive advocacy	1		Odds Ratio (M-H, Fixed, 95%	No totals

		CI)	
3.4.1 Up to 12 mths FU	1	Odds Ratio (M-H, Fixed, 95% CI)	No totals
3.5 Any advocacy	2	Std. Mean Difference (IV, Fixed, 95% CI)	No totals
3.5.1 Up to 12 mths FU	2	Std. Mean Difference (IV, Fixed, 95% CI)	No totals
3.5.2 12-24 mths FU	2	Std. Mean Difference (IV, Fixed, 95% CI)	No totals

Comparison 4. Overall abuse

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
4.1 Brief advocacy	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
4.1.1 Up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
4.2 Intensive advocacy	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
4.2.1 Up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
4.3 Any advocacy	2		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
4.3.1 Up to 12 mths FU	2		Std. Mean Difference (IV, Fixed, 95% CI)	No totals

Comparison 5. Risk for homicide

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
5.1 Brief advocacy	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
5.1.1 Up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
5.1.2 12-24 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals

Comparison 6. Work harassment

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
6.1 Brief advocacy	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals

6.1.1 Up to 12 mths FU	1	Std. Mean Difference (IV, Fixed, 95% CI)	No totals
6.1.2 12-24 mths FU	1	Std. Mean Difference (IV, Fixed, 95% CI)	No totals

Comparison 7. Quality of life

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
7.1 Brief advocacy "SF36 subscales" (mean change)	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
7.1.1 physical functioning up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
7.1.2 role physical up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
7.1.3 bodily pain up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
7.1.4 general health up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
7.1.5 vitality up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
7.1.6 social functioning up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
7.1.7 role emotional up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
7.1.8 mental health up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
7.2 Intensive advocacy "overall"	2		Mean Difference (IV, Fixed, 95% CI)	Subtotals only
7.2.1 Up to 12 mths FU	2	343	Mean Difference (IV, Fixed, 95% CI)	0.23 [0.00, 0.46]
7.2.2 12-24 mths FU	1	265	Mean Difference (IV, Fixed, 95% CI)	0.25 [-0.02, 0.52]
7.2.3 24+ mths FU	1	124	Mean Difference (IV, Fixed, 95% CI)	0.30 [-0.07, 0.67]

Comparison 8. Depression

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
8.1 Brief advocacy	1		Odds Ratio (M-H, Fixed, 95% CI)	No totals
8.1.1 Up to 12 mths FU	1		Odds Ratio (M-H, Fixed, 95% CI)	No totals

8.2 Intensive advocacy	2		Mean Difference (IV, Fixed, 95% CI)	Subtotals only
8.2.1 Up to 12 mths FU	2	343	Mean Difference (IV, Fixed, 95% CI)	-0.05 [-0.19, 0.09]
8.2.2 12-24 mths FU	1	265	Mean Difference (IV, Fixed, 95% CI)	-0.08 [-0.24, 0.08]

Comparison 9. Psychological distress

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
9.1 Brief advocacy	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
9.1.1 Up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
9.2 Intensive advocacy	2		Std. Mean Difference (IV, Fixed, 95% CI)	Subtotals only
9.2.1 Up to 12 mths FU	2	298	Std. Mean Difference (IV, Fixed, 95% CI)	-0.16 [-0.39, 0.06]
9.2.2 12-24 mths FU	1	265	Std. Mean Difference (IV, Fixed, 95% CI)	-0.01 [-0.25, 0.23]
9.2.3 24+ mths FU	1	124	Std. Mean Difference (IV, Fixed, 95% CI)	-0.13 [-0.49, 0.22]
9.3 Intensive advocacy (mean change)	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
9.3.1 Up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
9.4 Any advocacy	3		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
9.4.1 Up to 12 mths FU	3		Std. Mean Difference (IV, Fixed, 95% CI)	No totals

Comparison 10. PTSD

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
10.1 Brief advocacy	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
10.1.1 Up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals

Comparison 11. Perception of stress

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
11.1 Brief advocacy	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
11.1.1 Up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals

Comparison 12. Self efficacy

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
12.1 Intensive advocacy	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
12.1.1 Up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
12.1.2 12-24 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
12.1.3 24+ mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals

Comparison 13. Self esteem

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
13.1 Intensive advocacy	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
13.1.1 Up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals

Comparison 14. Social support

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
14.1 Intensive advocacy "overall"	2		Mean Difference (IV, Fixed, 95% CI)	Subtotals only
14.1.1 Up to 12 mths FU	2	343	Mean Difference (IV, Fixed, 95% CI)	0.08 [-0.16, 0.33]
14.1.2 12-24 mths FU	1	265	Mean Difference (IV, Fixed, 95% CI)	0.13 [-0.12, 0.38]
14.1.3 24+ mths FU	1	124	Mean Difference (IV, Fixed, 95% CI)	0.39 [0.04, 0.74]
14.2 Intensive advocacy (mean change)	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals

14.2.1 Overall support up to 12 mths FU	1	Std. Mean Difference (IV, Fixed, 95% CI)	No totals
14.2.2 tangible support up to 12 mths FU	1	Std. Mean Difference (IV, Fixed, 95% CI)	No totals
14.2.3 appraisal support up to 12 mths FU	1	Std. Mean Difference (IV, Fixed, 95% CI)	No totals
14.2.4 self-esteem support up to 12 mths FU	1	Std. Mean Difference (IV, Fixed, 95% CI)	No totals
14.2.5 belonging support up to 12 mths FU	1	Std. Mean Difference (IV, Fixed, 95% CI)	No totals

Comparison 15. Independence from assailant

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
15.1 Intensive advocacy	3		Odds Ratio (M-H, Fixed, 95% CI)	Subtotals only
15.1.1 Up to 12 mths FU	2	301	Odds Ratio (M-H, Fixed, 95% CI)	1.22 [0.74, 2.00]
15.1.2 12-24 mths FU	2	291	Odds Ratio (M-H, Fixed, 95% CI)	1.40 [0.88, 2.24]
15.1.3 24+ mths FU	1	119	Odds Ratio (M-H, Fixed, 95% CI)	0.97 [0.47, 1.98]
15.2 Intensive advocacy: missing reassigned (up to 12 mths FU)	2		Odds Ratio (M-H, Fixed, 95% CI)	Subtotals only
15.2.1 missing IG independent, CG not independent	2	330	Odds Ratio (M-H, Fixed, 95% CI)	1.58 [0.98, 2.55]
15.2.2 missing IG and CG all independent	2	330	Odds Ratio (M-H, Fixed, 95% CI)	1.13 [0.71, 1.80]
15.2.3 missing IG not independent, CG independent	2	330	Odds Ratio (M-H, Fixed, 95% CI)	0.82 [0.52, 1.31]
15.2.4 missing IG and CG all not independent	2	330	Odds Ratio (M-H, Fixed, 95% CI)	1.13 [0.70, 1.82]
15.3 Intensive advocacy: missing reassigned (12-24 mths FU)	2		Odds Ratio (M-H, Fixed, 95% CI)	Subtotals only
15.3.1 missing IG independent, CG not independent	2	320	Odds Ratio (M-H, Fixed, 95% CI)	1.81 [1.16, 2.84]
15.3.2 missing IG and CG all independent	2	320	Odds Ratio (M-H, Fixed, 95% CI)	1.32 [0.85, 2.06]
15.3.3 missing IG not independent, CG	2	320	Odds Ratio (M-H, Fixed, 95% CI)	0.95 [0.61, 1.48]

independent				
15.3.4 missing IG and CG all not independent	2	320	Odds Ratio (M-H, Fixed, 95% CI)	1.30 [0.83, 2.04]

Comparison 16. Emotional attachment to abuser

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
16.1 Intensive advocacy	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
16.1.1 Up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
16.1.2 12-24 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
16.1.3 24+ mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals

Comparison 17. Safety behaviours

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
17.1 Brief advocacy	2		Mean Difference (IV, Fixed, 95% CI)	Subtotals only
17.1.1 Up to 12 mths FU	2	468	Mean Difference (IV, Fixed, 95% CI)	0.60 [0.14, 1.06]
17.1.2 12-24 mths FU	2	468	Mean Difference (IV, Fixed, 95% CI)	0.48 [0.04, 0.92]

Comparison 18. Use of resources

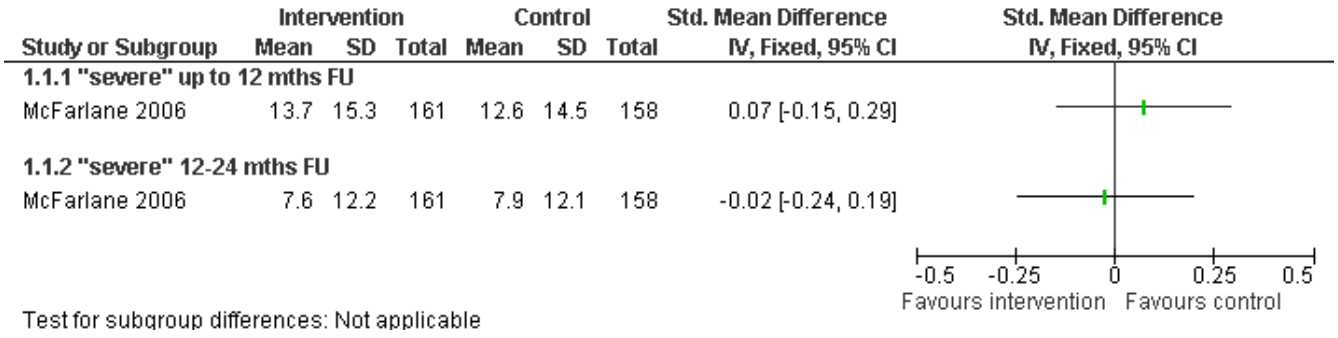
Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
18.1 Brief advocacy	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
18.1.1 Up to 12 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals
18.1.2 12-24 mths FU	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals

Comparison 19. Difficulty obtaining resources

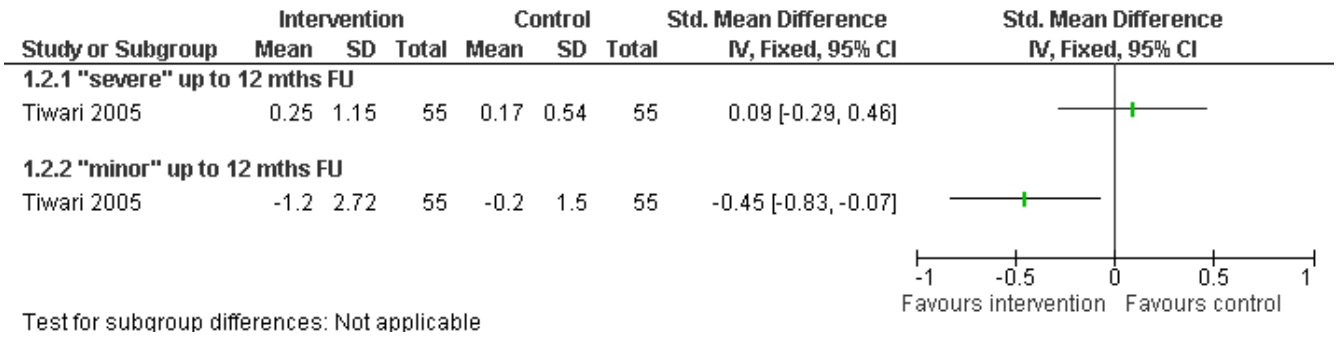
Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
19.1 Intensive advocacy	1		Std. Mean Difference (IV, Fixed, 95% CI)	No totals

19.1.1 Up to 12 mths FU	1	Std. Mean Difference (IV, Fixed, 95% CI)	No totals
19.1.2 12-24 mths FU	1	Std. Mean Difference (IV, Fixed, 95% CI)	No totals
19.1.3 24+ mths FU	1	Std. Mean Difference (IV, Fixed, 95% CI)	No totals

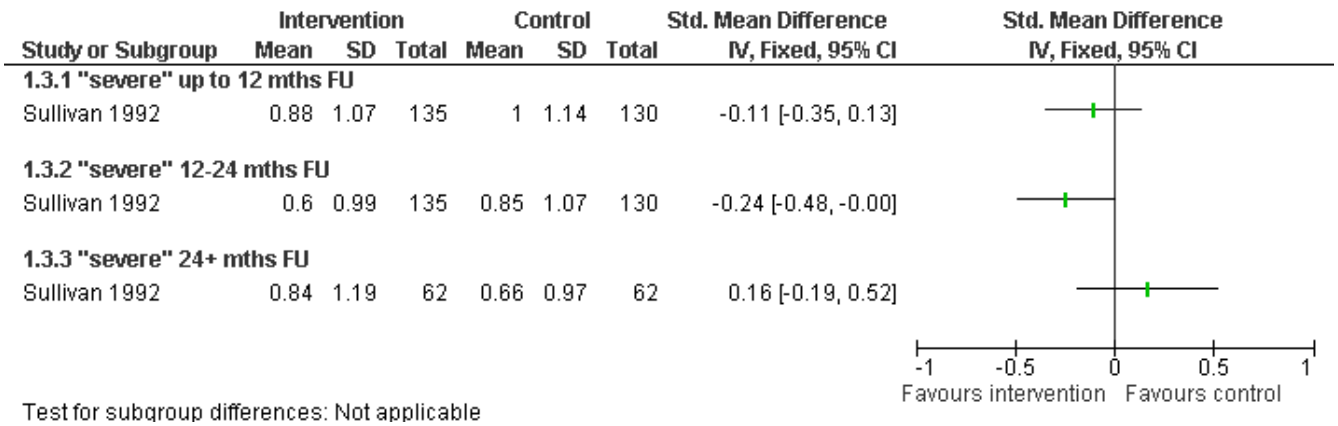
Analysis 1.1. Comparison 1 Physical abuse, Outcome 1 Brief advocacy.



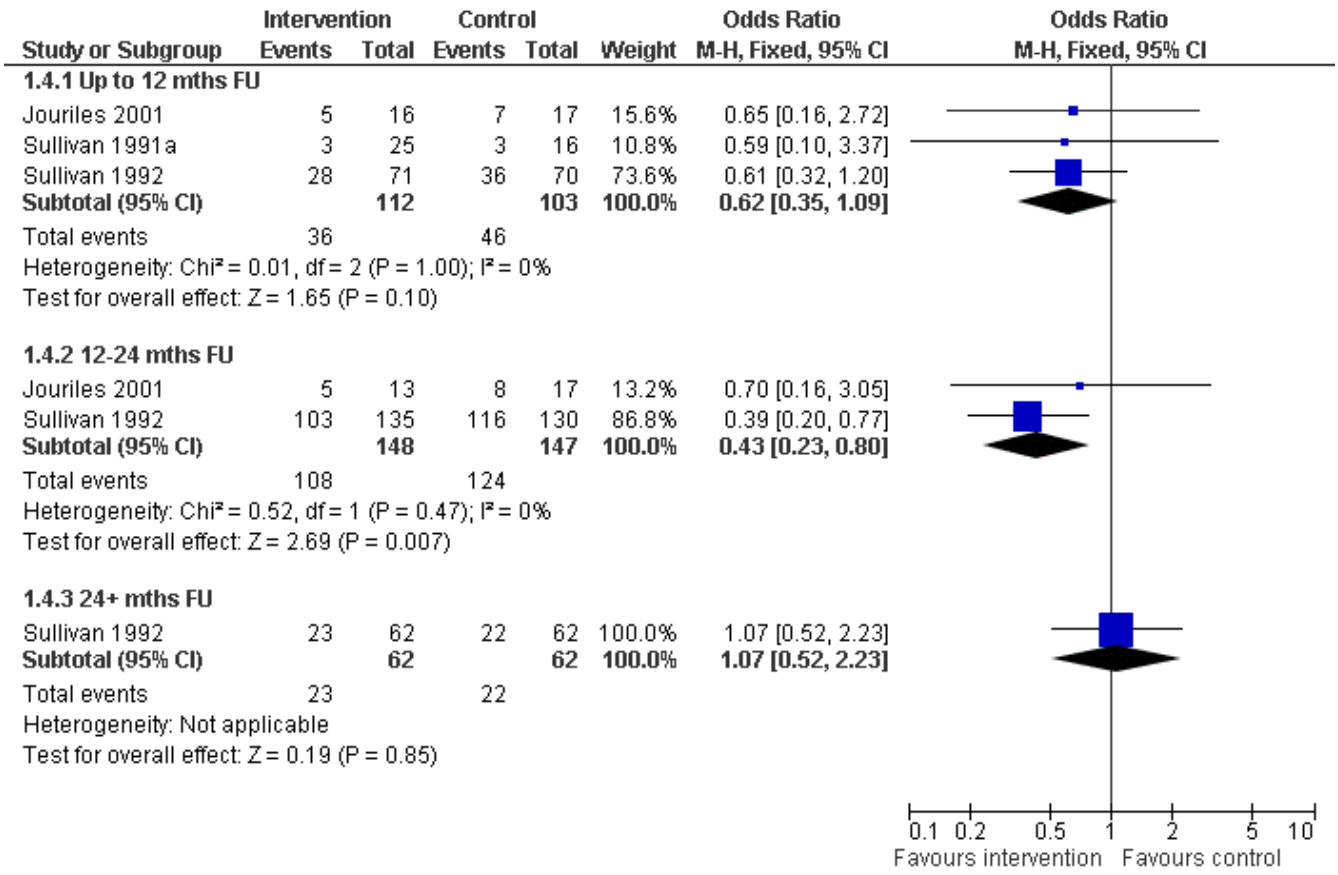
Analysis 1.2. Comparison 1 Physical abuse, Outcome 2 Brief advocacy (mean change).



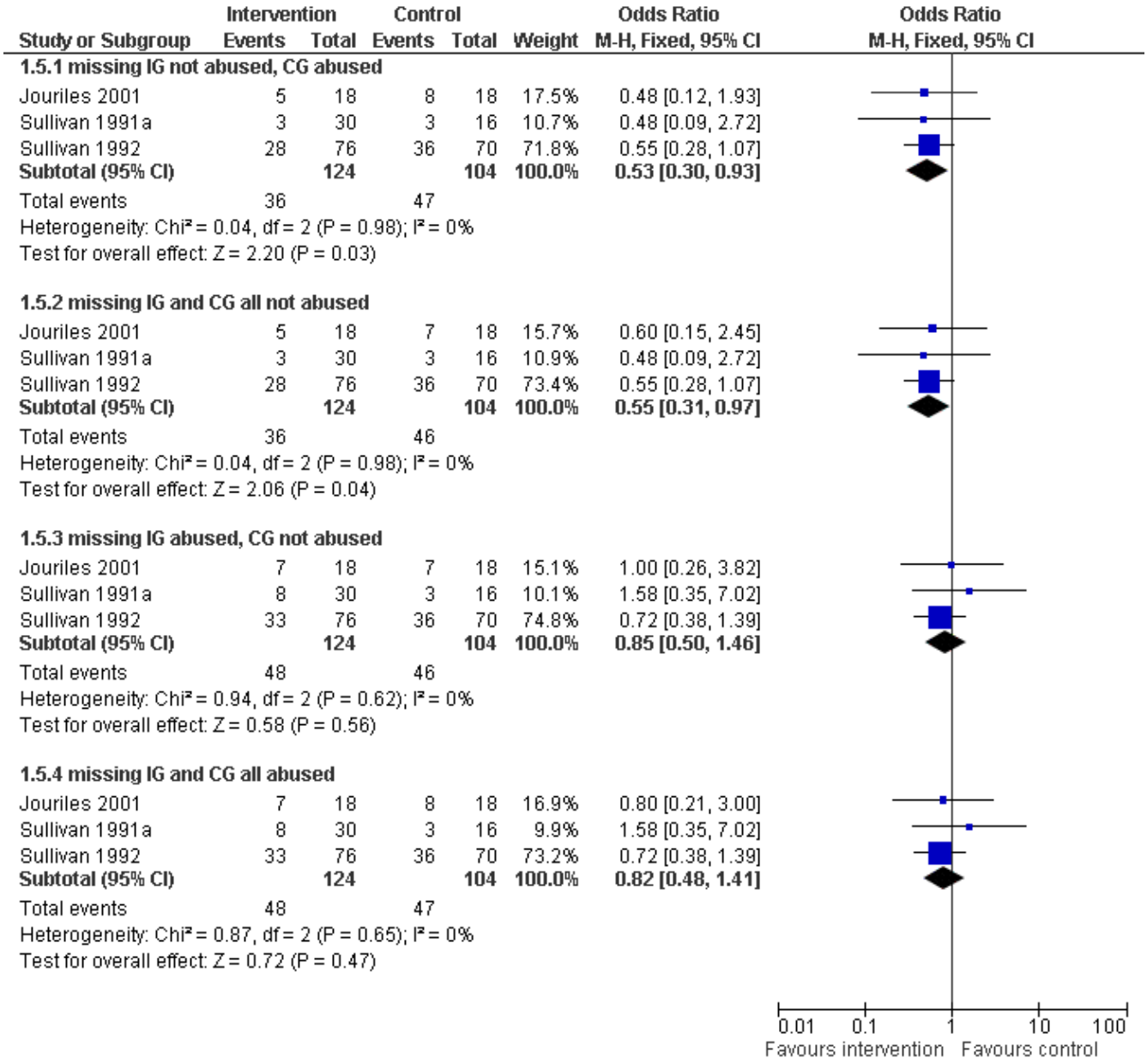
Analysis 1.3. Comparison 1 Physical abuse, Outcome 3 Intensive advocacy.



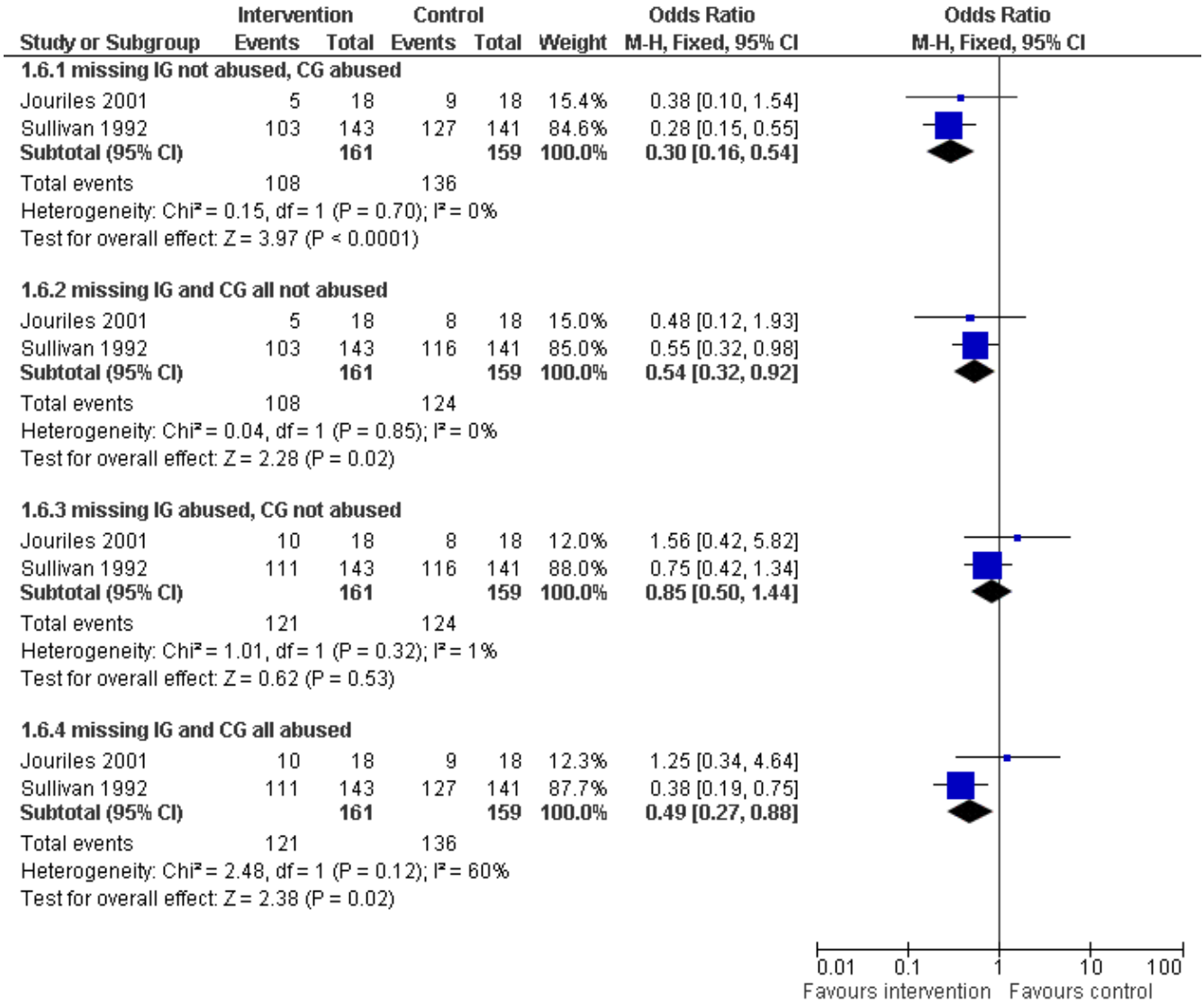
Analysis 1.4. Comparison 1 Physical abuse, Outcome 4 Intensive advocacy.



Analysis 1.5. Comparison 1 Physical abuse, Outcome 5 Intensive advocacy: missing reassigned (up to 12 mths FU).

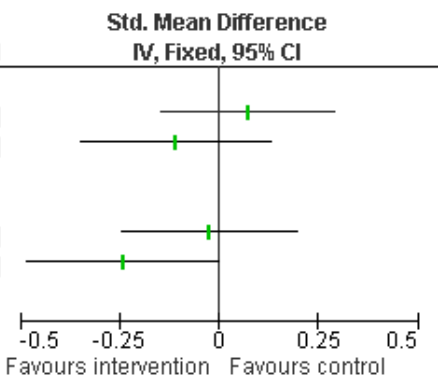


Analysis 1.6. Comparison 1 Physical abuse, Outcome 6 Intensive advocacy: missing reassigned (12-24 mths FU).



Analysis 1.7. Comparison 1 Physical abuse, Outcome 7 Any advocacy.

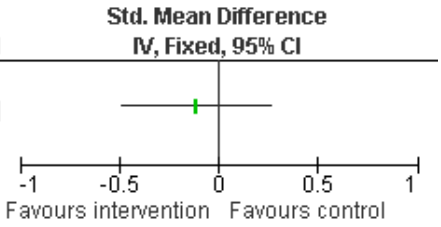
Study or Subgroup	Intervention Mean	SD	Total	Control Mean	SD	Total	Std. Mean Difference IV, Fixed, 95% CI
1.7.1 "severe" up to 12 mths FU							
McFarlane 2006	13.7	15.3	161	12.6	14.5	158	0.07 [-0.15, 0.29]
Sullivan 1992	0.88	1.07	135	1	1.14	130	-0.11 [-0.35, 0.13]
1.7.2 "severe" 12-24 mths FU							
McFarlane 2006	7.6	12.2	161	7.9	12.1	158	-0.02 [-0.24, 0.19]
Sullivan 1992	0.6	0.99	135	0.85	1.07	130	-0.24 [-0.48, -0.00]



Test for subgroup differences: Not applicable

Analysis 2.1. Comparison 2 Sexual abuse, Outcome 1 Brief advocacy (mean change).

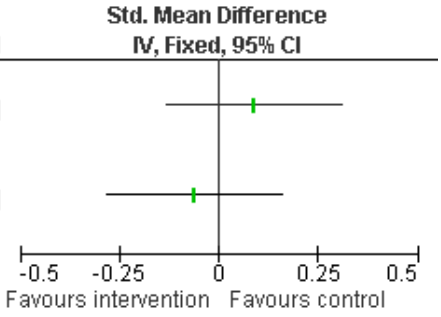
Study or Subgroup	Intervention Mean	SD	Total	Control Mean	SD	Total	Std. Mean Difference IV, Fixed, 95% CI
2.1.1 Up to 12 mths FU							
Tiwari 2005	-0.13	0.59	55	-0.06	0.62	55	-0.11 [-0.49, 0.26]



Test for subgroup differences: Not applicable

Analysis 3.1. Comparison 3 Emotional abuse, Outcome 1 Brief advocacy.

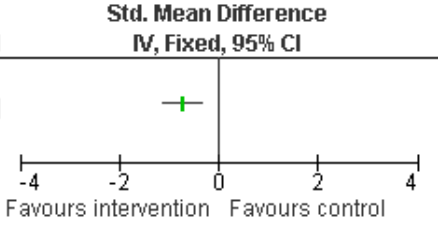
Study or Subgroup	Intervention Mean	SD	Total	Control Mean	SD	Total	Std. Mean Difference IV, Fixed, 95% CI
3.1.1 Up to 12 mths FU							
McFarlane 2006	15.7	13.3	161	14.5	13.4	158	0.09 [-0.13, 0.31]
3.1.2 12-24 mths FU							
McFarlane 2006	8.9	11.6	161	9.6	11.7	158	-0.06 [-0.28, 0.16]



Test for subgroup differences: Not applicable

Analysis 3.2. Comparison 3 Emotional abuse, Outcome 2 Brief advocacy (mean change).

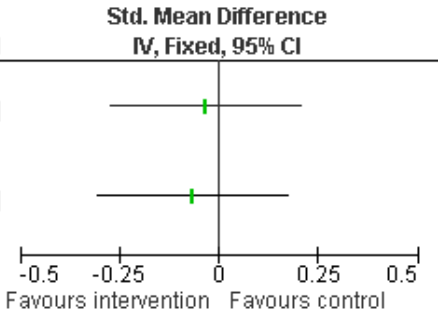
Study or Subgroup	Intervention Mean	SD	Total	Control Mean	SD	Total	Std. Mean Difference IV, Fixed, 95% CI
3.2.1 Up to 12 mths FU							
Tiwari 2005	-6.16	5.88	55	-1.92	5.78	55	-0.72 [-1.11, -0.34]



Test for subgroup differences: Not applicable

Analysis 3.3. Comparison 3 Emotional abuse, Outcome 3 Intensive advocacy.

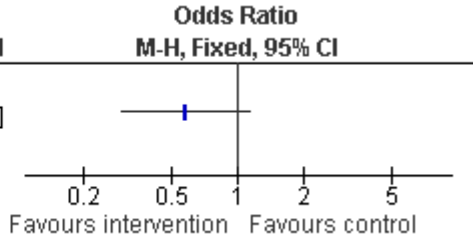
Study or Subgroup	Intervention Mean	SD	Total	Control Mean	SD	Total	Std. Mean Difference IV, Fixed, 95% CI
3.3.1 Up to 12 mths FU							
Sullivan 1992	1.42	0.61	135	1.44	0.58	130	-0.03 [-0.27, 0.21]
3.3.2 12-24 mths FU							
Sullivan 1992	1.36	0.63	135	1.4	0.58	130	-0.07 [-0.31, 0.18]



Test for subgroup differences: Not applicable

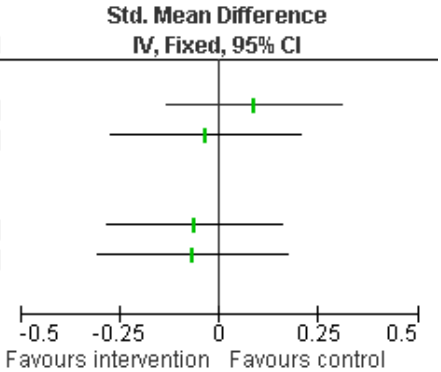
Analysis 3.4. Comparison 3 Emotional abuse, Outcome 4 Intensive advocacy.

Study or Subgroup	Intervention Events	Total	Control Events	Total	Odds Ratio M-H, Fixed, 95% CI
3.4.1 Up to 12 mths FU					
Sullivan 1992	30	71	39	70	0.58 [0.30, 1.13]



Analysis 3.5. Comparison 3 Emotional abuse, Outcome 5 Any advocacy.

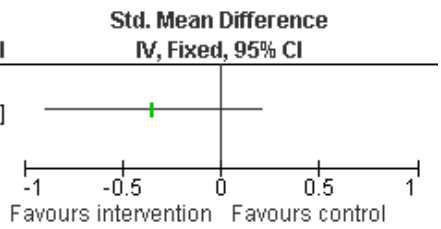
Study or Subgroup	Intervention Mean	SD	Total	Control Mean	SD	Total	Std. Mean Difference IV, Fixed, 95% CI
3.5.1 Up to 12 mths FU							
McFarlane 2006	15.7	13.3	161	14.5	13.4	158	0.09 [-0.13, 0.31]
Sullivan 1992	1.42	0.61	135	1.44	0.58	130	-0.03 [-0.27, 0.21]
3.5.2 12-24 mths FU							
McFarlane 2006	8.9	11.6	161	9.6	11.7	158	-0.06 [-0.28, 0.16]
Sullivan 1992	1.36	0.63	135	1.4	0.58	130	-0.07 [-0.31, 0.18]



Test for subgroup differences: Not applicable

Analysis 4.1. Comparison 4 Overall abuse, Outcome 1 Brief advocacy.

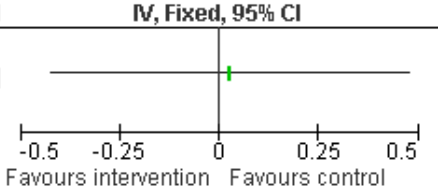
Study or Subgroup	Intervention Mean	SD	Total	Control Mean	SD	Total	Std. Mean Difference IV, Fixed, 95% CI
4.1.1 Up to 12 mths FU							
Hyman 2001	15.65	19.43	31	23.39	25.3	22	-0.35 [-0.90, 0.20]



Test for subgroup differences: Not applicable

Analysis 4.2. Comparison 4 Overall abuse, Outcome 2 Intensive advocacy.

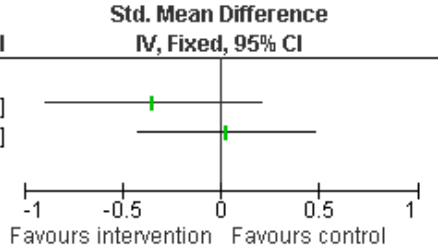
Study or Subgroup	Intervention Mean	SD	Total	Control Mean	SD	Total	Std. Mean Difference IV, Fixed, 95% CI
4.2.1 Up to 12 mths FU							
Sullivan 2002	0.6	0.69	45	0.58	0.68	33	0.03 [-0.42, 0.48]



Test for subgroup differences: Not applicable

Analysis 4.3. Comparison 4 Overall abuse, Outcome 3 Any advocacy.

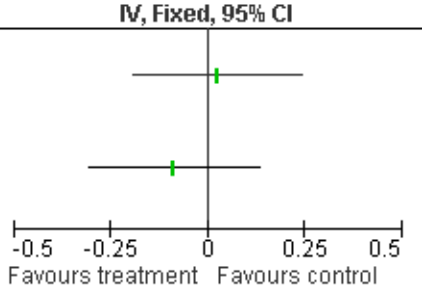
Study or Subgroup	Intervention Mean	SD	Total	Control Mean	SD	Total	Std. Mean Difference IV, Fixed, 95% CI
4.3.1 Up to 12 mths FU							
Hyman 2001	15.65	19.43	31	23.39	25.3	22	-0.35 [-0.90, 0.20]
Sullivan 2002	0.6	0.69	45	0.58	0.68	33	0.03 [-0.42, 0.48]



Test for subgroup differences: Not applicable

Analysis 5.1. Comparison 5 Risk for homicide, Outcome 1 Brief advocacy.

Study or Subgroup	Intervention Mean	SD	Total	Control Mean	SD	Total	Std. Mean Difference IV, Fixed, 95% CI
5.1.1 Up to 12 mths FU							
McFarlane 2006	4.9	3.7	161	4.8	3.6	158	0.03 [-0.19, 0.25]
5.1.2 12-24 mths FU							
McFarlane 2006	3.4	3.4	161	3.7	3.6	158	-0.09 [-0.31, 0.13]



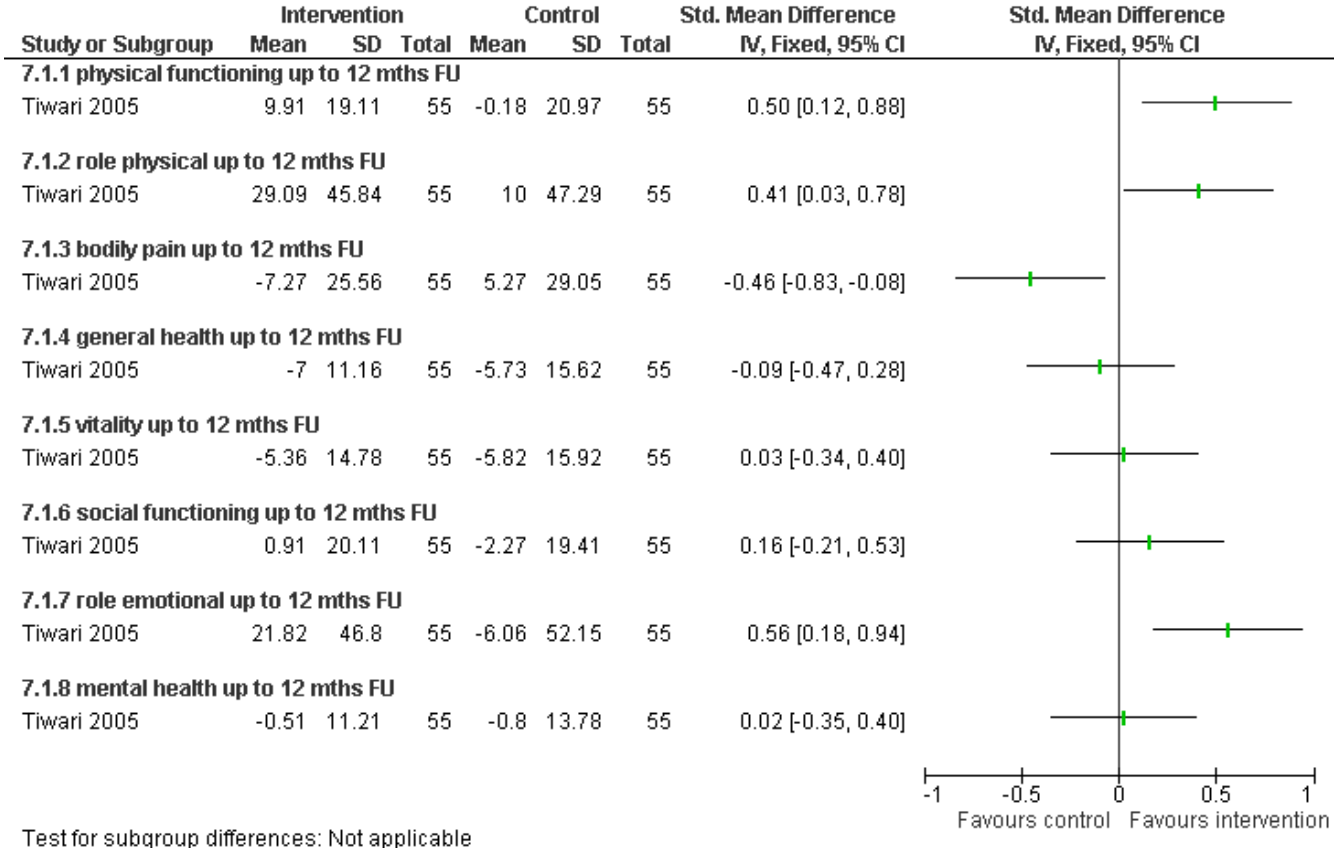
Test for subgroup differences: Not applicable

Analysis 6.1. Comparison 6Work harassment, Outcome 1 Brief advocacy.

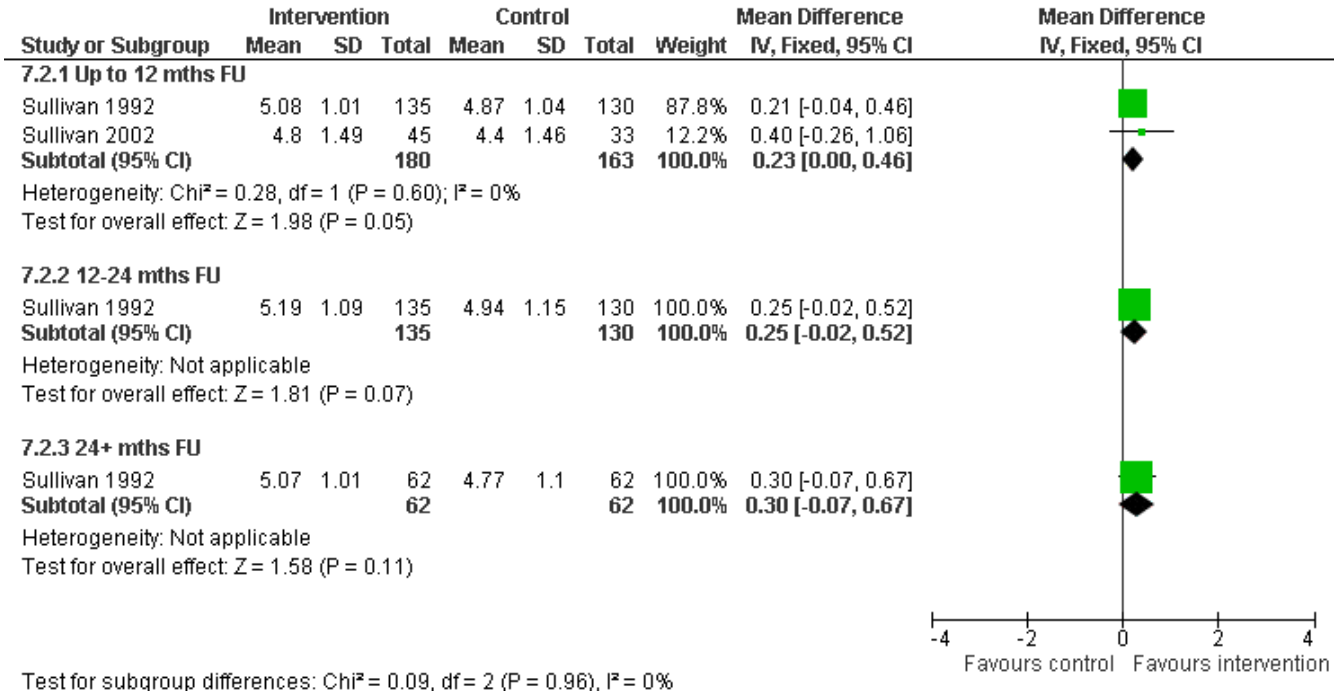
Study or Subgroup	Intervention Mean	SD	Total	Control Mean	SD	Total	Std. Mean Difference IV, Fixed, 95% CI
6.1.1 Up to 12 mths FU							
McFarlane 2006	1.9	2.1	161	1.8	2.1	158	0.05 [-0.17, 0.27]
6.1.2 12-24 mths FU							
McFarlane 2006	0.7	1.4	161	1.3	1.9	158	-0.36 [-0.58, -0.14]

Test for subgroup differences: Not applicable

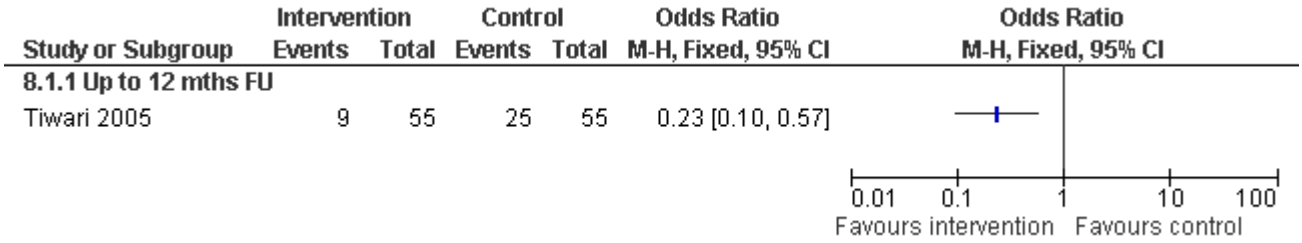
Analysis 7.1. Comparison 7 Quality of life, Outcome 1 Brief advocacy "SF36 subscales" (mean change).



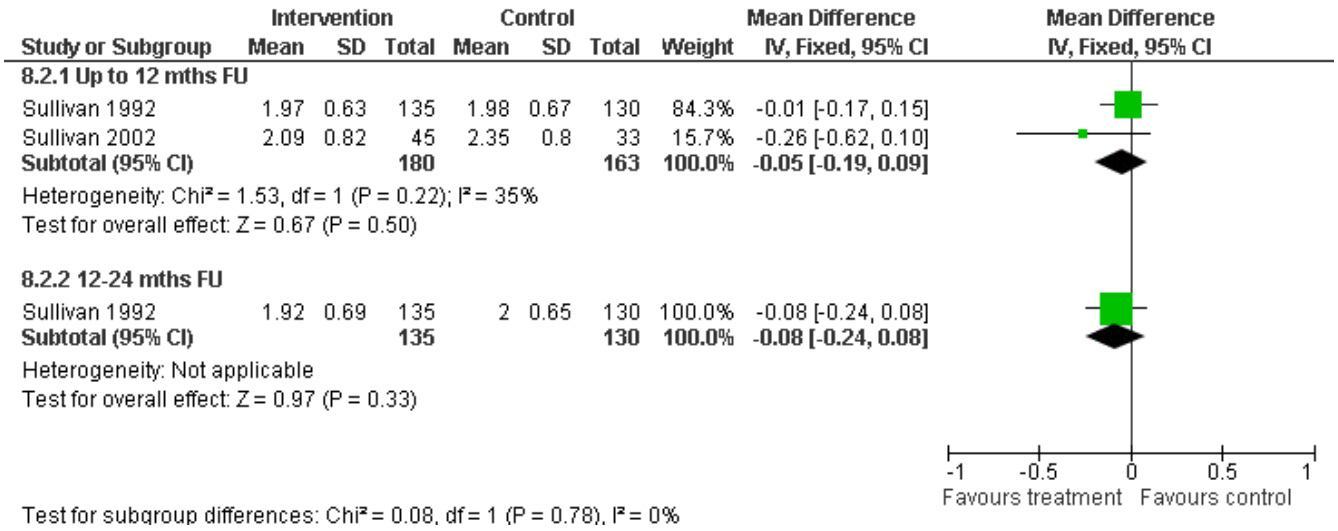
Analysis 7.2. Comparison 7 Quality of life, Outcome 2 Intensive advocacy "overall".



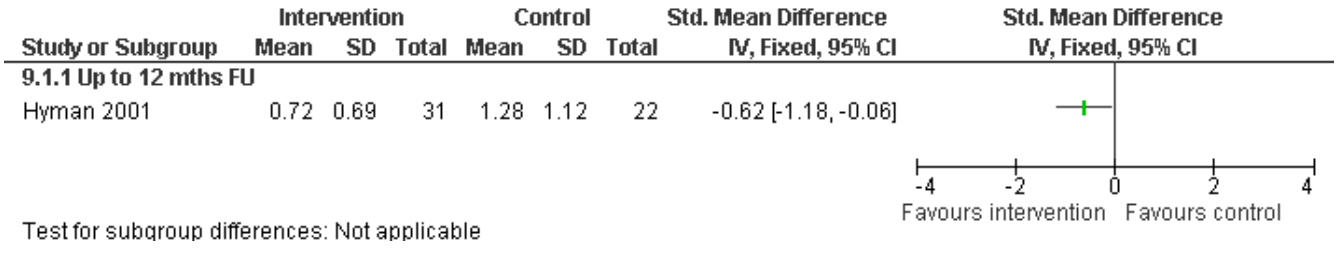
Analysis 8.1. Comparison 8 Depression, Outcome 1 Brief advocacy.



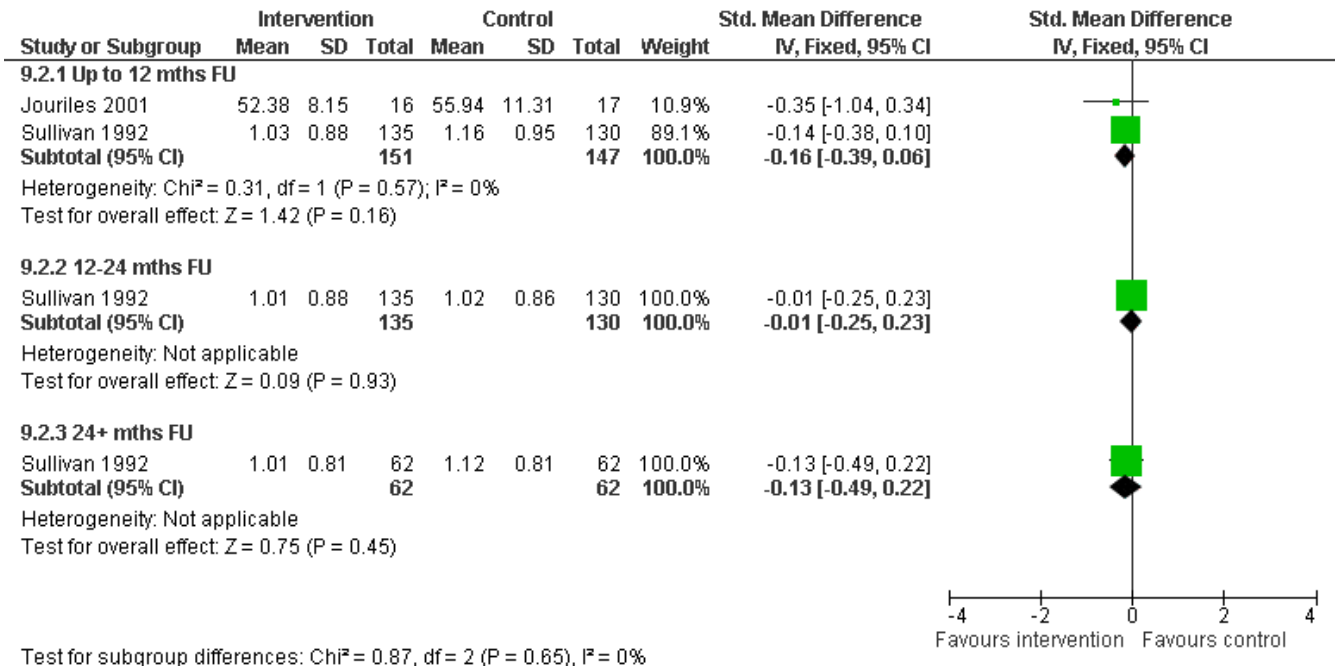
Analysis 8.2. Comparison 8 Depression, Outcome 2 Intensive advocacy.



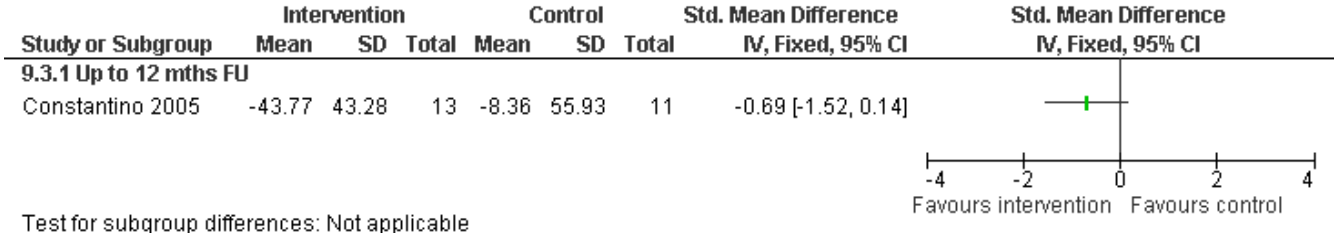
Analysis 9.1. Comparison 9 Psychological distress, Outcome 1 Brief advocacy.



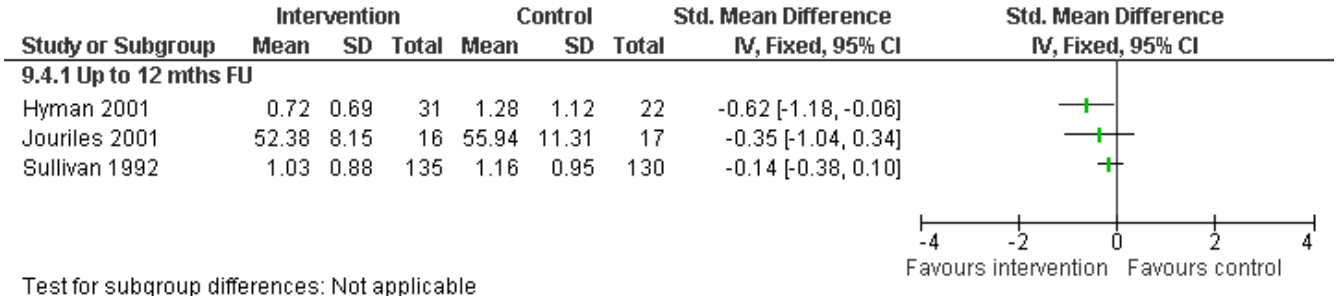
Analysis 9.2. Comparison 9 Psychological distress, Outcome 2 Intensive advocacy.



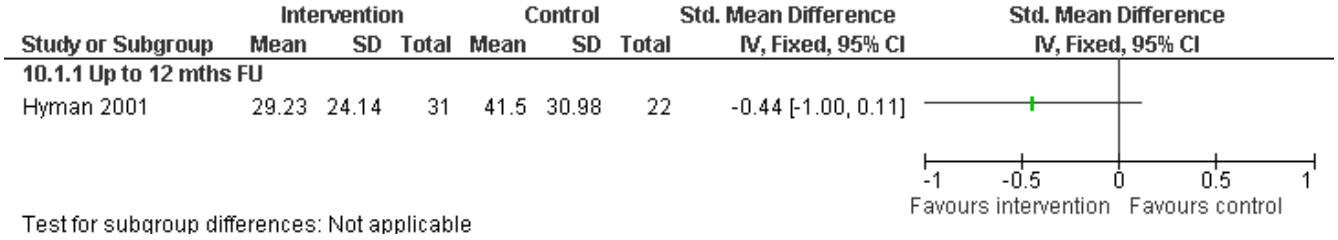
Analysis 9.3. Comparison 9 Psychological distress, Outcome 3 Intensive advocacy (mean change).



Analysis 9.4. Comparison 9 Psychological distress, Outcome 4 Any advocacy.

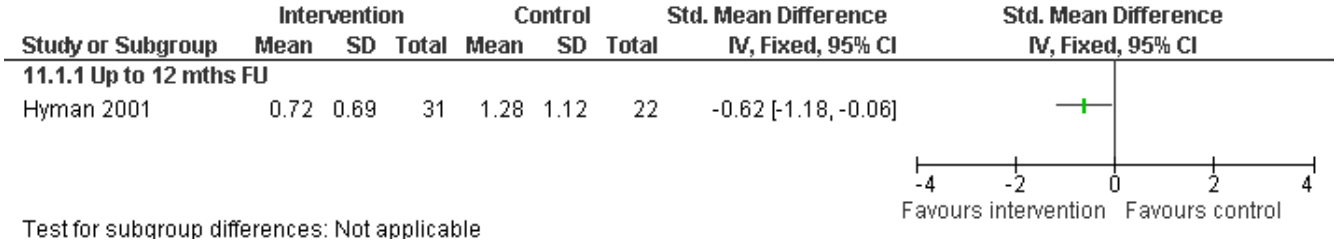


Analysis 10.1. Comparison 10 PTSD, Outcome 1 Brief advocacy.



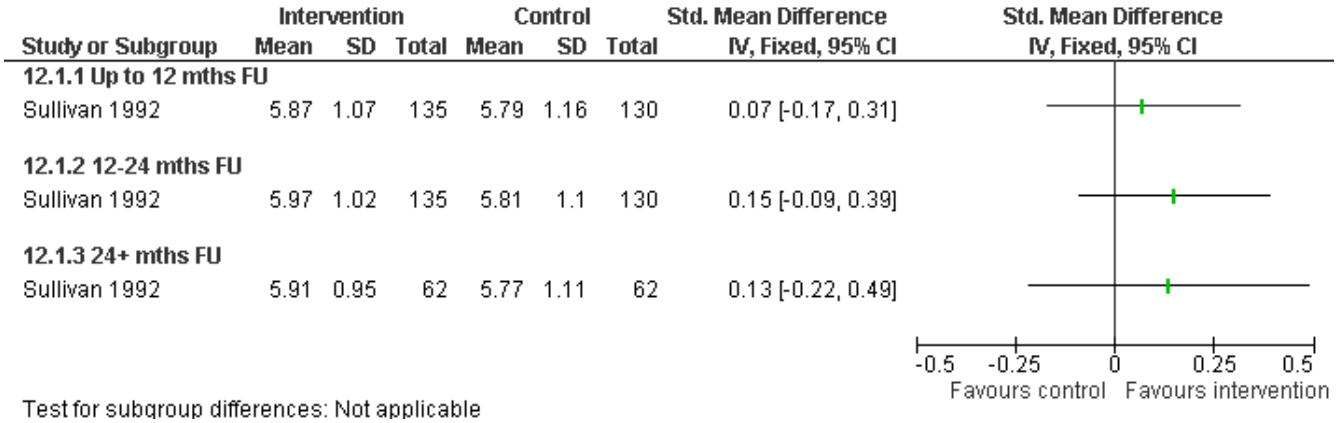
Test for subgroup differences: Not applicable

Analysis 11.1. Comparison 11 Perception of stress, Outcome 1 Brief advocacy.



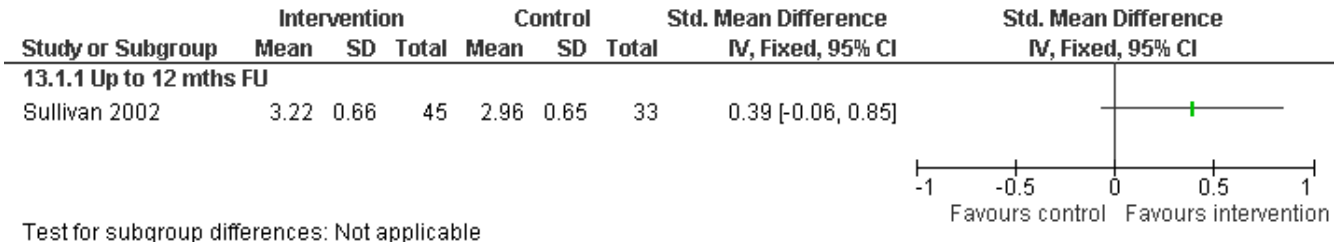
Test for subgroup differences: Not applicable

Analysis 12.1. Comparison 12 Self efficacy, Outcome 1 Intensive advocacy.



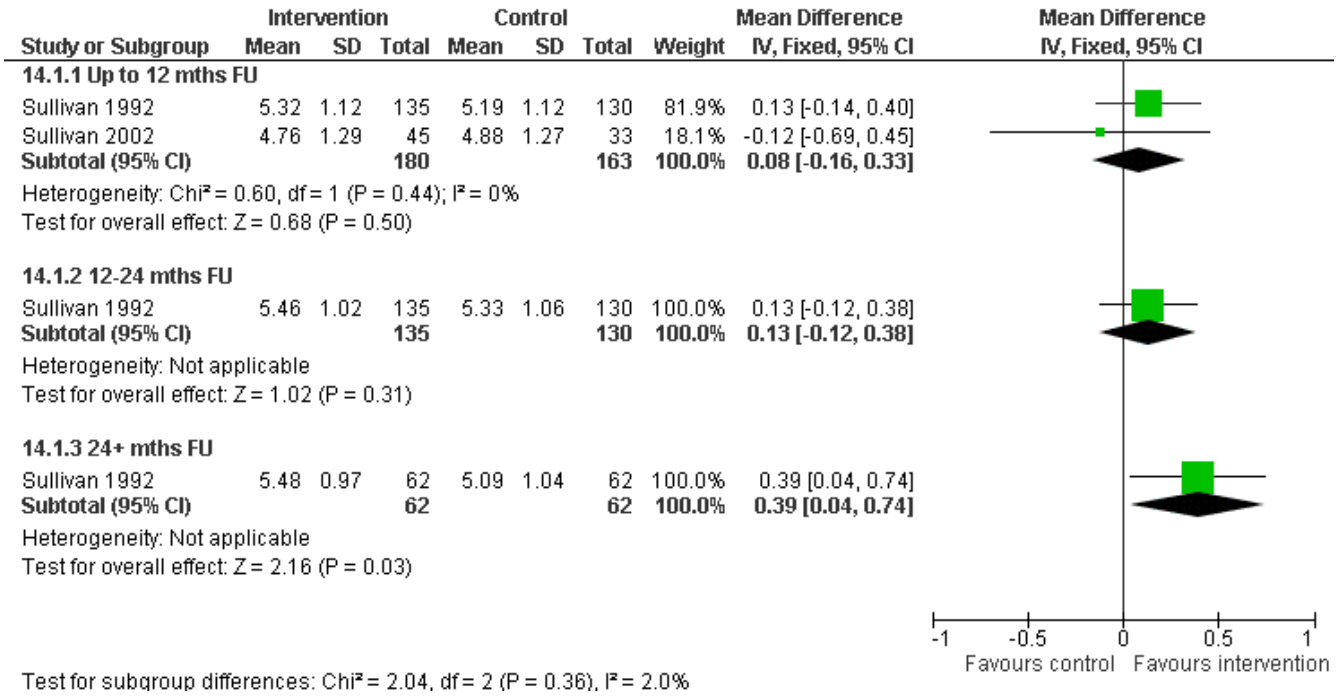
Test for subgroup differences: Not applicable

Analysis 13.1. Comparison 13 Self esteem, Outcome 1 Intensive advocacy.

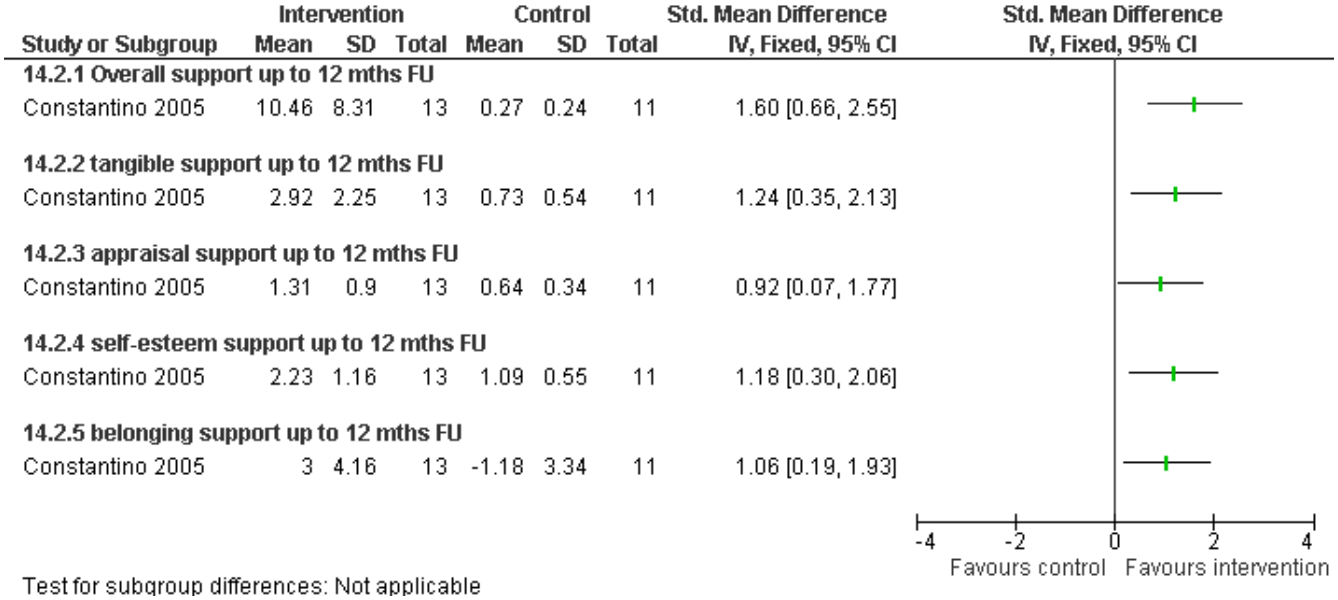


Test for subgroup differences: Not applicable

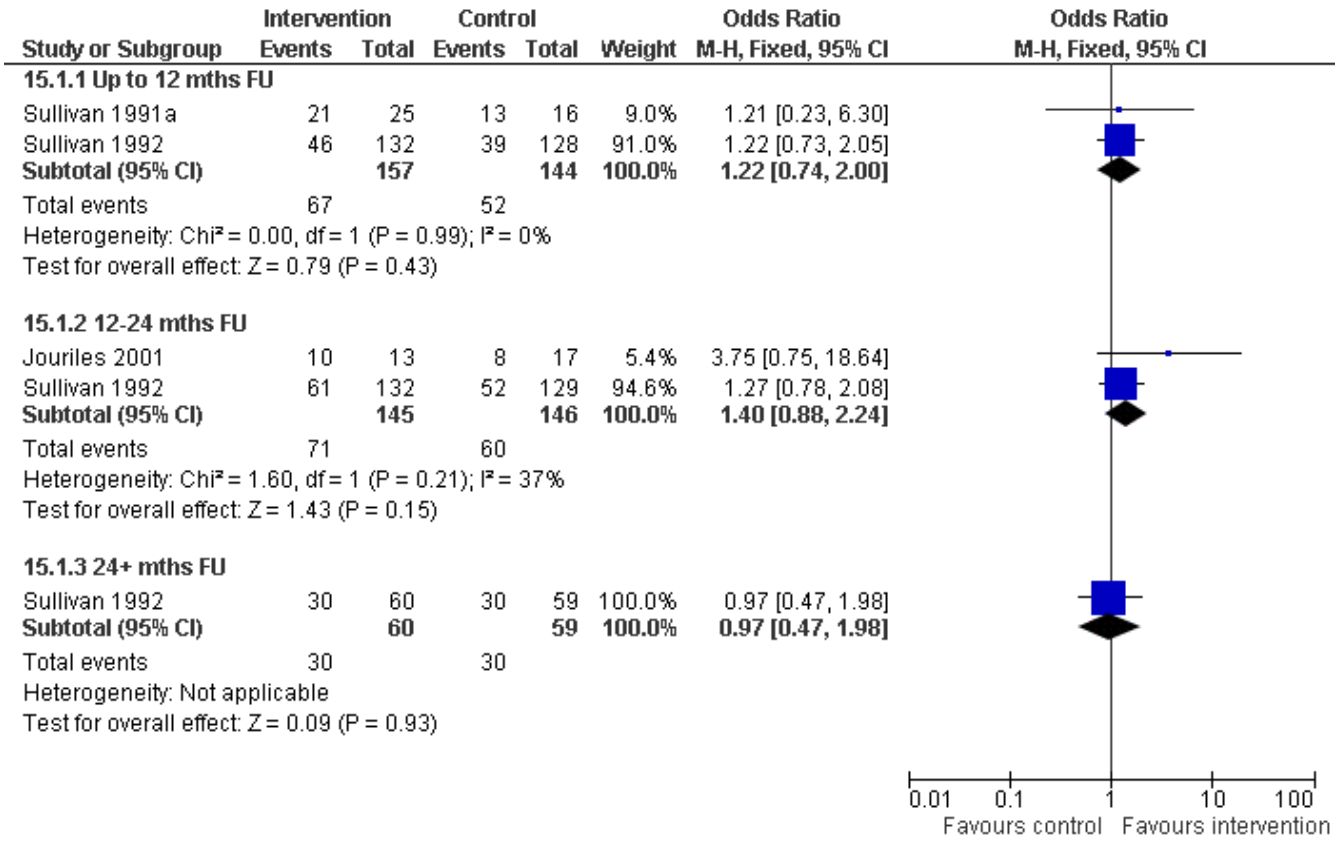
Analysis 14.1. Comparison 14 Social support, Outcome 1 Intensive advocacy "overall".



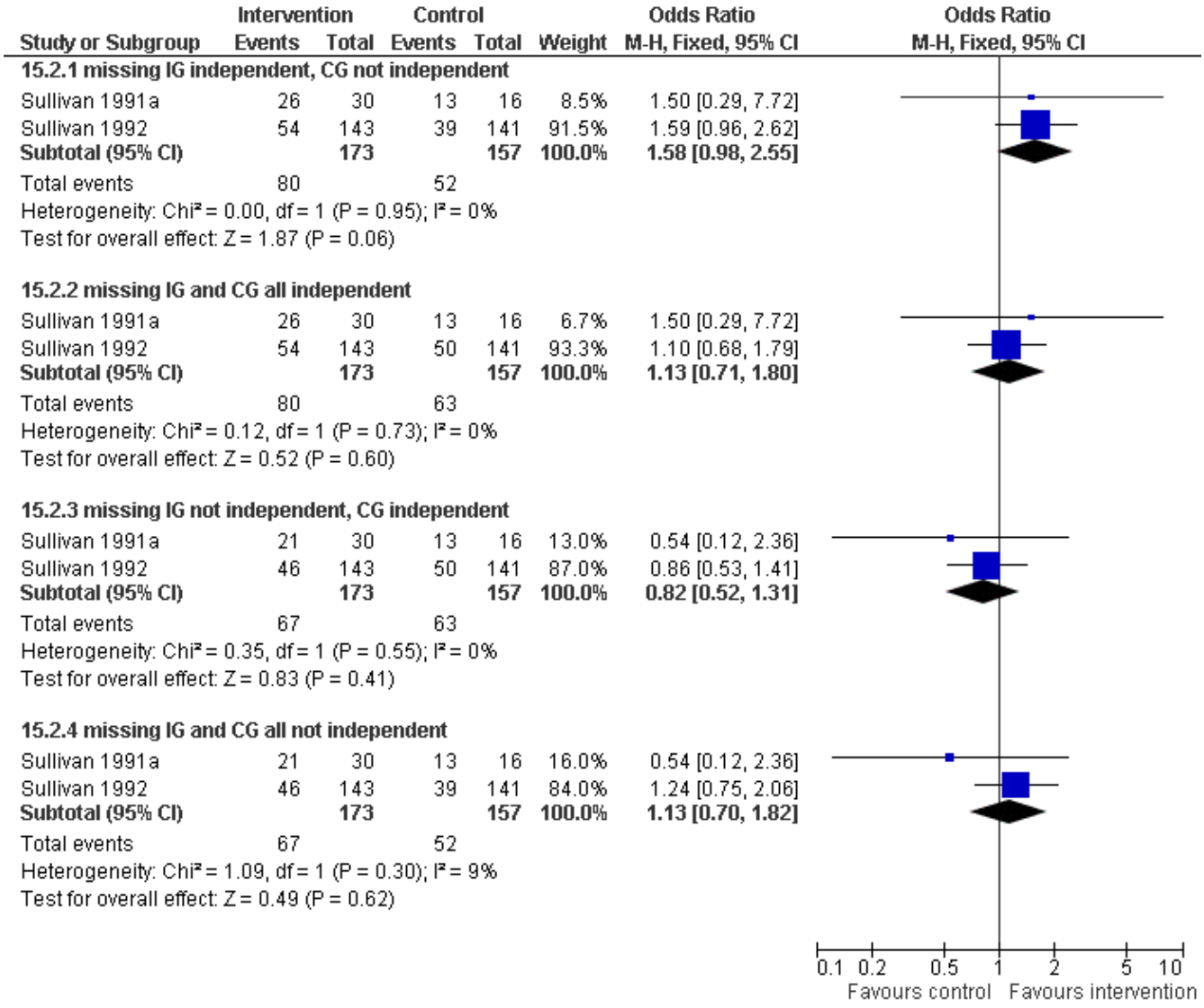
Analysis 14.2. Comparison 14 Social support, Outcome 2 Intensive advocacy (mean change).



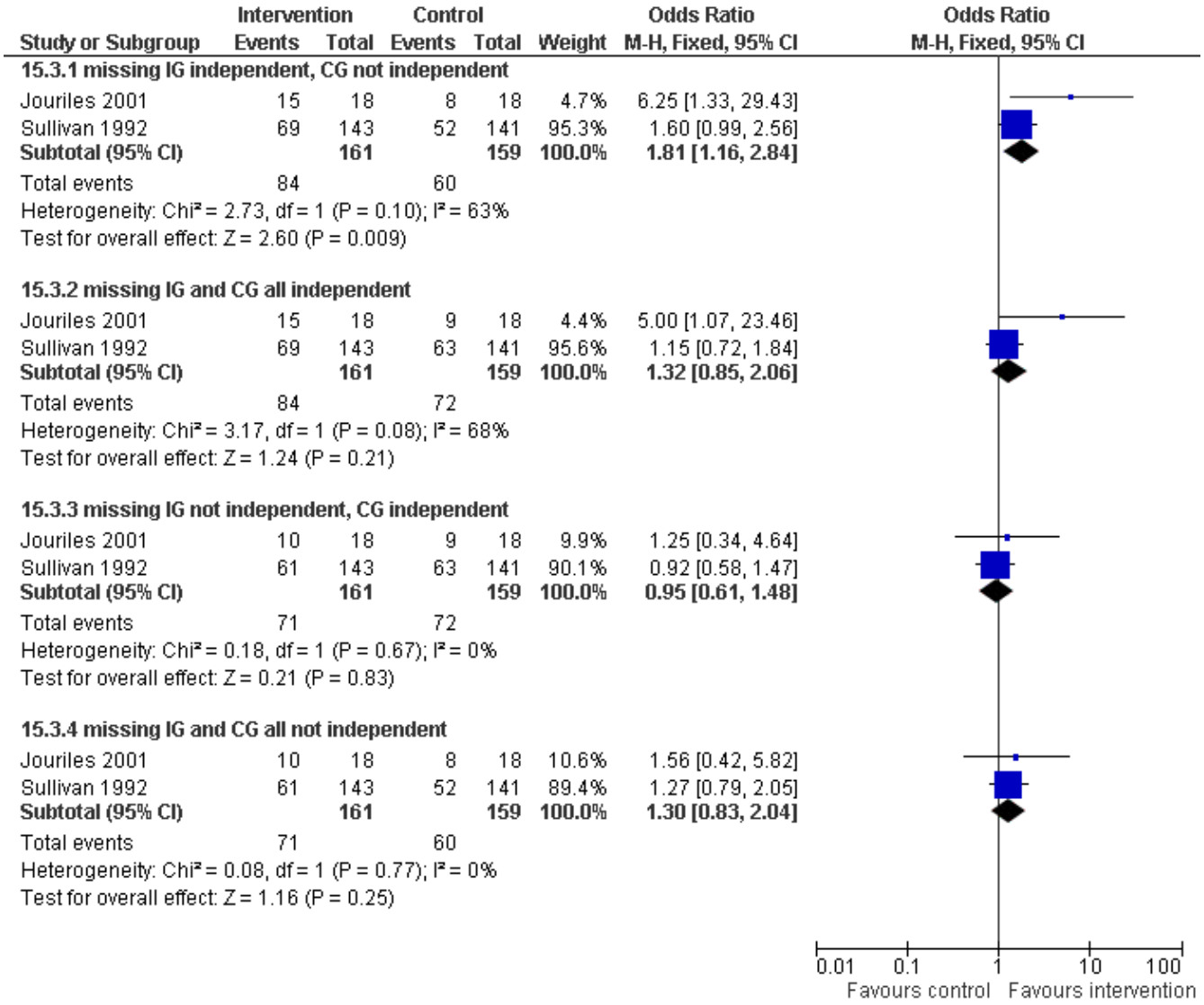
Analysis 15.1. Comparison 15 Independence from assailant, Outcome 1 Intensive advocacy.



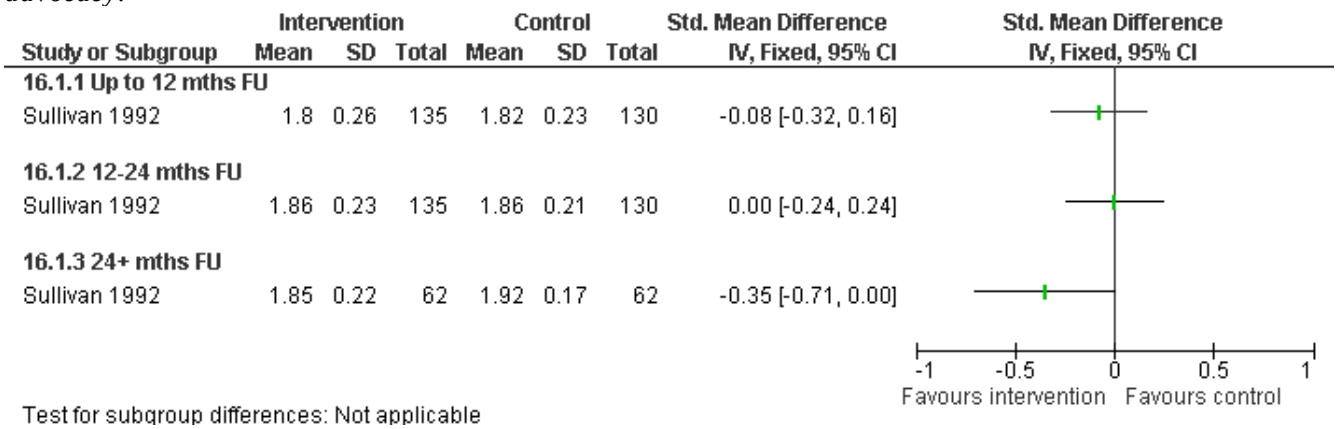
Analysis 15.2. Comparison 15 Independence from assailant, Outcome 2 Intensive advocacy: missing reassigned (up to 12 mths FU).



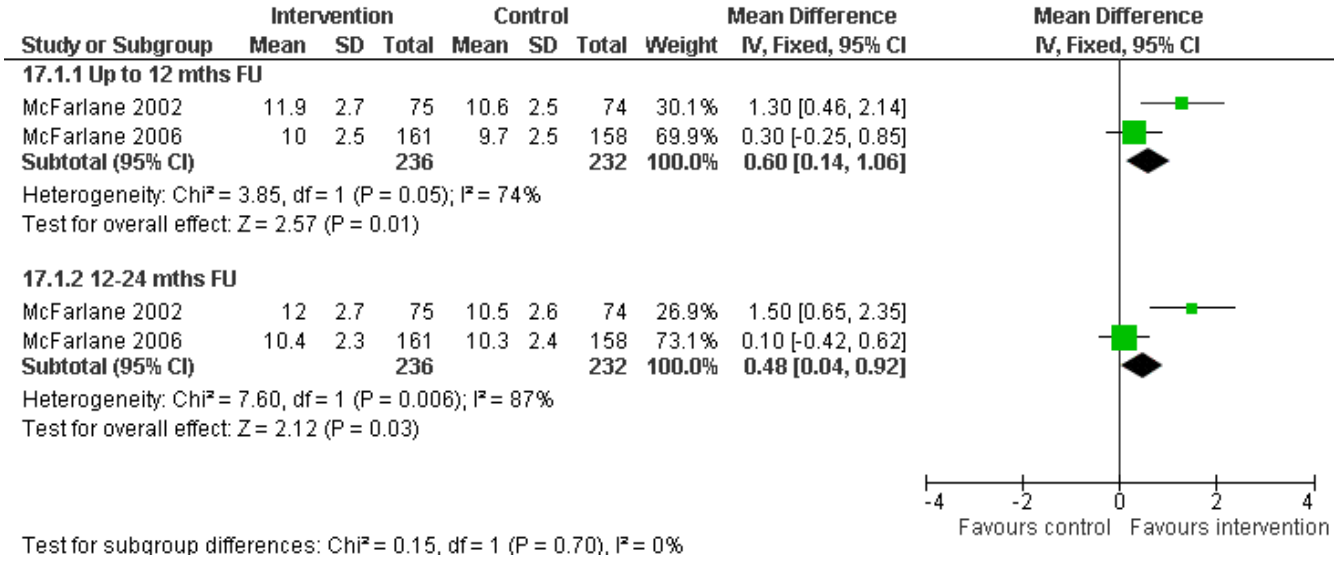
Analysis 15.3. Comparison 15 Independence from assailant, Outcome 3 Intensive advocacy: missing reassigned (12-24 mths FU).



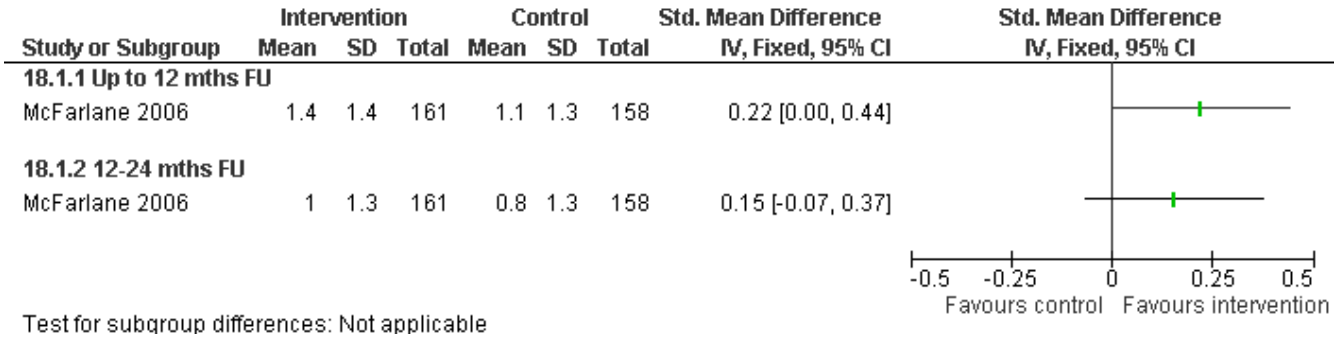
Analysis 16.1. Comparison 16 Emotional attachment to abuser, Outcome 1 Intensive advocacy.



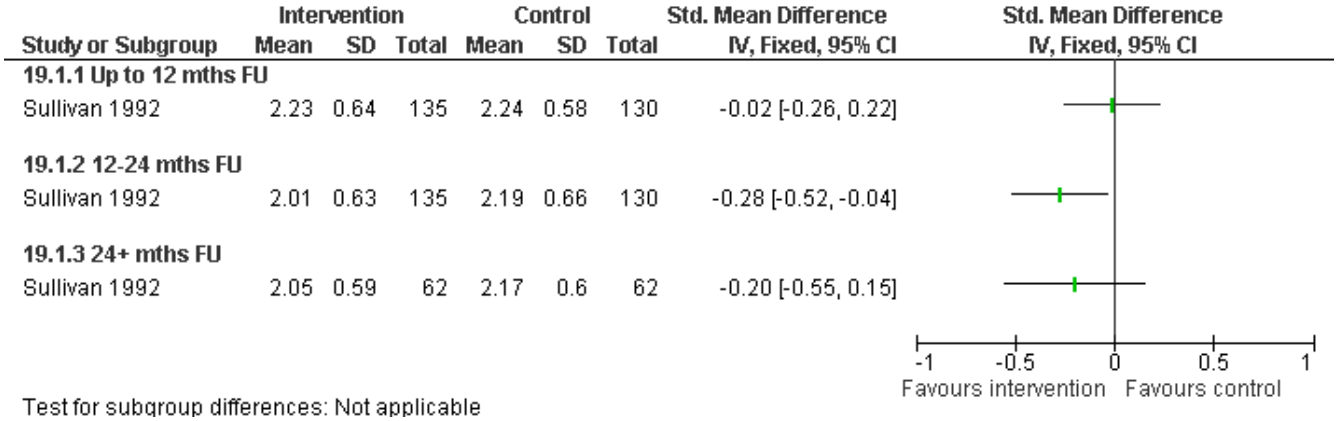
Analysis 17.1. Comparison 17 Safety behaviours, Outcome 1 Brief advocacy.



Analysis 18.1. Comparison 18 Use of resources, Outcome 1 Brief advocacy.



Analysis 19.1. Comparison 19 Difficulty obtaining resources, Outcome 1 Intensive advocacy.



15 Appendices

15.1 CENTRAL AND DARE SEARCH STRATEGY

CENTRAL AND DARE were searched via the Cochrane Library 2008 (Issue 3)
1.Battered Women in Title, Abstract or Keywords
2.Spouse Abuse in Title, Abstract or Keywords
3.Domestic Violence in Title, Abstract or Keywords
4.abuse* near/3 wom*n in Title, Abstract or Keywords
5.abuse* near/3 partner* in Title, Abstract or Keywords
6.abuse* near/3 spous* in Title, Abstract or Keywords
7.(wife or wives) near/3 batter* in Title, Abstract or Keywords
8.(wife or wives) near/3 abuse* in Title, Abstract or Keywords
9.partner* near/3 violen* in Title, Abstract or Keywords
10.spous* near/3 violen* in Title, Abstract or Keywords
11.dat* near/3 violen* in Title, Abstract or Keywords
12.(#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11)
13.Child Abuse in Title, Abstract or Keywords
14.Child Abuse, Sexual in Title, Abstract or Keywords
15.(#13 OR #14)
16.(#12 AND NOT #15)

15.2 MEDLINE SEARCH STRATEGY

MEDLINE search via OVID 1966 to 31st July 2008
1.(BATTERED ADJ WOMEN).TI,AB.
2.BATTERED-WOMEN.MJ. OR SPOUSE-ABUSE.MJ. OR DOMESTIC-VIOLENCE.MJ.
3.(ABUSE$3 NEAR WOM$3).TI,AB.
4.(ABUSE$ NEAR PARTNER$).TI,AB.
5.(ABUSE$ NEAR SPOUS$).TI,AB.
6.((WIFE OR WIVES) NEAR BATTER$).TI,AB.
7.((WIFE OR WIVES) NEAR ABUSE$).TI,AB.
8.(VIOLEN$ NEAR PARTNER$).TI,AB.
9.(VIOLEN$ NEAR SPOUS$).TI,AB.
10.(VIOLEN$ NEAR (DATE OR DATING)).TI,AB.

11.1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10
12.(CHILD ADJ ABUSE).TI,AB.
13.CHILD-ABUSE.MJ. OR CHILD-ABUSE-SEXUAL.MJ.
14.11 NOT (12 OR 13)
15.(WOM$3 OR FEMALE$3).TI,AB.
16.WOMEN.MJ. OR FEMALE.MJ.
17.(ADOLESCEN$ OR TEEN$).TI,AB.
18.ADOLESCENT.MJ.
19.15 OR 16 OR 17 OR 18
20.ADVOCACY.TI,AB.
21.PATIENT-ADVOCACY#.DE. OR CONSUMER-ADVOCACY#.DE.
22.COUNSEL$.TI,AB.
23.COUNSELING#.W..DE.
24.(SOCIAL ADJ WORK).TI,AB.
25.SOCIAL-WORK#.DE.
26.MENTOR$.TI,AB.
27.MENTORS#.W..DE.
28.(CRISIS ADJ INTERVENTION).TI,AB.
29.CRISIS-INTERVENTION#.DE.
30.(RISK ADJ ASSESSMENT).TI,AB.
31.RISK-ASSESSMENT#.DE.
32.(SOCIAL ADJ WELFARE).TI,AB.
33.SOCIAL-WELFARE#.DE.
34.(SOCIAL ADJ SUPPORT).TI,AB.
35.SOCIAL-SUPPORT#.DE.
36.(HELP ADJ SEEKING).TI,AB.
37.(INFORMATION ADJ GIVING).TI,AB.
38.(GIV$3 ADJ INFORMATION).TI,AB.
39.(ADVICE ADJ GIVING).TI,AB.
40.(GIV$3 ADJ ADVICE).TI,AB.
41.(PATIENT ADJ EDUCATION).TI,AB.
42.PATIENT-EDUCATION#.DE.
43.HEALTH-EDUCATION#.DE.
44.SAFETY.TI,AB.
45.SAFETY#.DE.
46.(WOMENS ADJ HEALTH).TI,AB.
47.WOMENS-HEALTH#.DE.
48.20 OR 21 OR 22 OR 23 OR 24 OR 25 OR 26 OR 27 OR 28 OR 29 OR 30 OR 31 OR 32 OR 33 OR 34 OR 35 OR 36 OR 37 OR 38 OR 39 OR 40 OR 41 OR 42 OR 43 OR 44 OR 45 OR 46 OR 47
49.14 AND 19 AND 48

15.3 EMBASE SEARCH STRATEGY

EMBASE searched via OVID 1980 to week 30 2008
1. (BATTERED ADJ WOMEN).TI,AB.
2.BATTERED-WOMAN.MJ. OR PARTNER-VIOLENCE.MJ. OR DOMESTIC-VIOLENCE.MJ. OR FAMILY-VIOLENCE.MJ. OR BATTERING.W..MJ.
3.(ABUSE$ NEAR WOM$).TI,AB.
4.(ABUSE$ NEAR PARTNER$).TI,AB.
5.(ABUSE$ NEAR SPOUS$).TI,AB.
6.((WIFE OR WIVES) NEAR BATTER$).TI,AB.
7.((WIFE OR WIVES) NEAR ABUSE$).TI,AB.
8.(VIOLEN$ NEAR PARTNER$).TI,AB.
9.(VIOLEN$ NEAR SPOUS$).TI,AB.
10.(VIOLEN$ NEAR (DATE OR DATING)).TI,AB.
11.1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10
12.(CHILD ADJ ABUSE).TI,AB.
13.CHILD-ABUSE.MJ.
14.CHILD-SEXUAL-ABUSE.MJ.
15.11 NOT (12 OR 13 OR 14)
16.(WOM$3 OR FEMALE$3).TI,AB.
17.WOMEN.MJ.
18.FEMALE.MJ.
19.(ADOLESCEN$ OR TEEN$).TI,AB.
20.16 OR 17 OR 18 OR 19
21.ADVOCACY.TI,AB.
22.PATIENT-ADVOCACY#.W..DE.
23.CONSUMER-ADVOCACY#.W..DE.
24.COUNSEL$.TI,AB.
25.PATIENT-COUNSELING#.W..DE.
26.(SOCIAL ADJ WORK).TI,AB.
27.SOCIAL-WORK#.DE.
28.MENTOR$.TI,AB.
29.(CRISIS ADJ INTERVENTION).TI,AB.
30.CRISIS-INTERVENTION#.DE.
31.(RISK ADJ ASSESSMENT).TI,AB.
32.RISK-ASSESSMENT#.DE.
33.(SOCIAL ADJ WELFARE).TI,AB.
34.SOCIAL-WELFARE#.DE.
35.(SOCIAL ADJ SUPPORT).TI,AB.
36.SOCIAL-SUPPORT#.DE.
37.(HELP ADJ SEEKING).TI,AB.
38.HELP-SEEKING-BEHAVIOR#.DE.
39.(INFORMATION ADJ GIVING).TI,AB.
40.MEDICAL-INFORMATION#.DE.

41.(GIV$3 ADJ INFORMATION).TI,AB.
42.(ADVICE ADJ GIVING).TI,AB.
43.(GIV$3 ADJ ADVICE).TI,AB.
44.(PATIENT ADJ EDUCATION).TI,AB.
45.PATIENT-EDUCATION#.DE. OR HEALTH-EDUCATION#.DE.
46.SAFETY.TI,AB.
47.SAFETY#.DE.
48.PATIENT-SAFETY#.DE.
49.(WOMENS ADJ HEALTH).TI,AB.
50.21 OR 22 OR 23 OR 24 OR 25 OR 26 OR 27 OR 28 OR 29 OR 30 OR 31 OR 32 OR 33 OR 34 OR 35 OR 36 OR 37 OR 38 OR 39 OR 40 OR 41 OR 42 OR 43 OR 44 OR 45 OR 46 OR 47 OR 48 OR 49
51.15 AND 20 AND 50

15.4 CINAHL SEARCH STRATEGY

1.(BATTERED ADJ WOMEN).TI,AB.
2.BATTERED-WOMEN.MJ. OR PARTNER-ABUSE.MJ. OR DOMESTIC-VIOLENCE.MJ. OR SPOUSE-ABUSE.MJ.
3.(ABUSE$ NEAR (WOM$ OR PARTNER$ OR SPOUS$)).TI,AB.
4.((WIFE OR WIVES) NEAR (BATTER$ OR ABUSE$)).TI,AB.
5.(VIOLEN$ NEAR (PARTNER$ OR SPOUS$ OR DATE OR DATING)).TI,AB.
6.1 OR 2 OR 3 OR 4 OR 5
7.(CHILD ADJ ABUSE).TI,AB.
8.CHILD-ABUSE.MJ. OR CHILD-ABUSE-SEXUAL.MJ.
9.6 NOT (7 OR 8)
10.(WOM$ OR FEMALE$).TI,AB.
11.WOMEN.W..MJ.
12.MOTHER$.TI,AB.
13.MOTHERS.W..MJ.
14.(ADOLESCEN$ OR TEEN$).TI,AB.
15.10 OR 11 OR 12 OR 13 OR 14
16.ADVOCACY.TI,AB.
17.PATIENT-ADVOCACY#.DE. OR CONSUMER-ADVOCACY#.DE.
18.COUNSEL$.TI,AB.
19.COUNSELING#.W..DE.
20.MENTOR$.TI,AB.
21.MENTORSHIP#.W..DE.
22.(CRISIS ADJ INTERVENTION).TI,AB.
23.CRISIS-INTERVENTION#.DE.
24.(RISK ADJ ASSESSMENT).TI,AB.
25.RISK-ASSESSMENT#.DE.
26.(SOCIAL ADJ WELFARE).TI,AB.
27.SOCIAL-WELFARE#.DE.

28.(SOCIAL ADJ SUPPORT).TI,AB.
29.SUPPORT-PSYCHOSOCIAL#.DE. OR SOCIAL-NETWORKS#.DE.
30.(HELP ADJ SEEKING).TI,AB.
31.HELP-SEEKING-BEHAVIOR#.DE.
32.(GIV$ ADJ (INFORMATION OR ADVICE)).TI,AB.
33.PATIENT-EDUCATION#.DE.
34.(HEALTH ADJ EDUCATION).TI,AB.
35.HEALTH-EDUCATION#.DE.
36.SAFETY.TI,AB.
37.SAFETY#.W..DE. OR PATIENT-SAFETY#.DE.
38.(SOCIAL ADJ WORK).TI,AB.
39.SOCIAL-WORK#.DE.(WOMENS ADJ HEALTH).TI,AB.
40.WOMENS-HEALTH#.DE.
41.(WOMENS ADJ HEALTH ADJ SERVICES).TI,AB.
42.WOMENS-HEALTH-SERVICES#.DE.
43.16 OR 17 OR 18 OR 19 OR 20 OR 21 OR 22 OR 23 OR 24 OR 25 OR 26 OR 27 OR 28 OR 29 OR 30 OR 31 OR 32 OR 33 OR 34 OR 35 OR 36 OR 37 OR 38 OR 39 OR 40 OR 41 OR 42
44.9 AND 15 AND 43

15.5 NATIONAL RESEARCH REGISTER

Searched 2006 (Issue 4)
1.((batter* near woman) or (batter* near women) or (batter* near spouse) or (batter* near wife) or (batter* near wives) or (batter* near partner))
2.((abuse* near woman) or (abuse* near women) or (abuse* near spouse) or (abuse* near wife) or (abuse* near wives) or (abuse* near partner))
3.((violen* near woman) or (violen* near women) or (violen* near spouse) or (violen* near wife) or (violen* near wives) or (violen* near partner))
4.((violen* near dat*) or (domestic near violence) or (family near violence))
5.((child* near abuse*) or (child* near sex* near abuse*))
6.(#1 or #2 or #3 or #4)
7.(#6 and (not #5))

15.6 ASSIA SEARCH STRATEGY

ASSIA searched via CSA 1987 to 31st July 2008
((KW=((abuse* within 3 (wom?n or partner* or spous* or wife or wives)) or (batter* within 3 (wom?n or partner* or spous* or wife or wives)) or (violen* within 3 (wom?n or partner* or spous* or wife or wives))) or KW=((family violence) or (domestic violence) or (dat* violence)) and not KW=((child* within 3 abuse) or (child* within 3 sex* within 3 abuse) or (child* within 3 maltreatment))) and (KW=((wom?n or female* or mother*) or (adolescen* or teen*))) and

(KW=((advocacy or counsel* or mentor*) or (crisis within 3 (intervention or management)) or (risk within 3 assessment)) or KW=((social within 3 (support or welfare)) or (help within 3 seek*) or (giv* within 3 (information or advice))) or KW=((safety) or (education within 3 (patient or health))))

15.7 SSCI SEARCH STRATEGY

Social Science Citation Index, (SSCI), searched via ISI Web of Science 1970 to 31st July 2008
#40 # 39AND #27 AND #22
#39 #38 OR #37 OR #36 OR #35 OR #34 OR #33 OR #32 OR #31 OR #30 OR #29 OR #28
#38 TS=(safety)
#37 TS=(Patient same Education)
#36 TS=(giv* same advice)
#35 TS=(giv* same information)
#34 TS=(help* same seek*)
#33 TS==(Social same Support)
#32 TS=(social welfare)
#31 TS=(Risk same Assessment)
#30 TS=(mentor*)
#29 TS=(counsel*)
#28 TS=advoca*
#27 #26 OR #25 OR #24 OR #23
#26 TS=wom*n
#25 TS=female*
#24 TS=(mother*)
#23 TS=(adolescen* or teen*)
#22 #20 NOT #21
#21 #19 OR #18
#20 #17 OR #16 OR #15 OR #14 OR #13 OR #12 OR #11 OR #10 OR #9 OR #8 OR #7 OR #6 OR #5 OR #4 OR #3 OR #2 OR #1
#19 TS=(child* SAME abuse* SAME sexual*)
#18 TS==(child same abuse)
#17 TS=(dat* SAME violen*)
#16 TS=(domestic violence)
#15 TS=(violen* wives)
#14 TS=(violen* SAME wife)
#13 TS=(violen* SAME partner*)
#12 TS=(violen* SAME spous*)
#11 TS=(violen* SAME wom*n)
#10 TS=(abuse* wives)
#9 TS=(abuse* SAME wife)
#8 TS=(abuse* SAME partner*)

#7 TS=(abuse* SAME spous*)
#6 TS=(abuse* SAME wom*n)
#5 TS=(batter* wives)
#4 TS=(batter* SAME wife)
#3 TS=(batter* SAME partner*)
#2 TS=(batter* SAME spous*)
#1 TS=(batter* SAME wom*n)

15.8 IBSS SEARCH STRATEGY

International Bibliography of Social Sciences, (IBSS), searched via OVID 1951 to July week 4 2008
1.(batter$ adj3 wom#n).mp. [mp=abstract, title, subject heading, geographic heading]
2.(batter$ adj3 spous$).mp. [mp=abstract, title, subject heading, geographic heading]
3.(batter$ adj3 partner$).mp. [mp=abstract, title, subject heading, geographic heading]
4.(batter$ adj3 wife).mp. [mp=abstract, title, subject heading, geographic heading]
5.(batter$ adj3 wives).mp. [mp=abstract, title, subject heading, geographic heading]
6.(abuse$ adj3 wom#n).mp. [mp=abstract, title, subject heading, geographic heading]
7.(abuse$ adj3 spous$).mp. [mp=abstract, title, subject heading, geographic heading]
8.(abuse$ adj3 partner$).mp. [mp=abstract, title, subject heading, geographic heading]
9.(abuse$ adj3 wife).mp. [mp=abstract, title, subject heading, geographic heading]
10.(abuse$ adj3 wives).mp. [mp=abstract, title, subject heading, geographic heading]
11.(violen$ adj3 wom#n).mp. [mp=abstract, title, subject heading, geographic heading]
12.(violen$ adj3 spous$).mp. [mp=abstract, title, subject heading, geographic heading]
13.(violen$ adj3 partner$).mp. [mp=abstract, title, subject heading, geographic heading]
14.(violen$ adj3 wife).mp. [mp=abstract, title, subject heading, geographic heading]
15.(violen$ adj3 wives).mp. [mp=abstract, title, subject heading, geographic heading]
16.domestic violence.mp. [mp=abstract, title, subject heading, geographic heading]
17.(dat$ adj3 violen$).mp. [mp=abstract, title, subject heading, geographic heading]
18.(child adj3 abuse).mp. [mp=abstract, title, subject heading, geographic heading]
19.(Child$ adj3 abuse adj3 sexual$).mp. [mp=abstract, title, subject heading, geographic heading]
20.1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17

21.20 not (18 or 19)
22.(wom#n or female$).mp. [mp=abstract, title, subject heading, geographic heading]
23.(adolescen$ or teen$).mp. [mp=abstract, title, subject heading, geographic heading]
24.22 or 23
25.advoca$.mp. [mp=abstract, title, subject heading, geographic heading]
26.counsel$.mp. [mp=abstract, title, subject heading, geographic heading]
27.mentor$.mp. [mp=abstract, title, subject heading, geographic heading]
28.(Crisis adj3 Intervention).mp. [mp=abstract, title, subject heading, geographic heading]
29.(Risk adj3 Assessment).mp. [mp=abstract, title, subject heading, geographic heading]
30.Social Welfare.mp. [mp=abstract, title, subject heading, geographic heading]
31.(Social adj3 Support).mp. [mp=abstract, title, subject heading, geographic heading]
32.(help$ adj3 seek$).mp. [mp=abstract, title, subject heading, geographic heading]
33.(giv$ adj3 information).mp. [mp=abstract, title, subject heading, geographic heading]
34.(giv$ adj3 advice).mp. [mp=abstract, title, subject heading, geographic heading]
35.(information giving or (giv$ adj3 information)).mp. [mp=abstract, title, subject heading, geographic heading]
36.(advice giving or (giv$ adj3 advice)).mp. [mp=abstract, title, subject heading, geographic heading]
37.(Patient adj3 Education).mp. [mp=abstract, title, subject heading, geographic heading]
38.(safety or safety behav$).mp. [mp=abstract, title, subject heading, geographic heading]
39.(Health adj3 Education).mp. [mp=abstract, title, subject heading, geographic heading]
40.25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39
41.21 and 24 and 40

15.9 PSYCINFO SEARCH STRATEGY

PsycINFO searched via OVID 1806 to July week 4 2008
1.(BATTERED ADJ WOMEN).TI,AB.
2.BATTERED-FEMALES.MJ. OR DOMESTIC-VIOLENCE.MJ. OR PARTNER-ABUSE.MJ.
3.(ABUSE$3 NEAR WOM$3).TI,AB.
4.(ABUSE$3 NEAR PARTNER$3).TI,AB.
5.(ABUSE$3 NEAR SPOUS$3).TI,AB.
6.(WIFE OR WIVES) NEAR BATTER$3.TI,AB.

7.(WIFE OR WIVES) NEAR ABUSE$3.TI,AB.
8.(VIOLEN$3 NEAR PARTNER$3).TI,AB.
9.(VIOLEN$3 NEAR SPOUS$3).TI,AB.
10.(VIOLEN$3 NEAR (DATE OR DATING)).TI,AB.
11.1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10
12.(CHILD ADJ ABUSE).TI,AB.
13.CHILD-ABUSE.MJ.
14.(CHILD$ NEAR ABUSE NEAR SEXUAL).TI,AB.
15.11 NOT (12 OR 13 OR 14)
16.(WOM$3 OR FEMALE$3).TI,AB.
17.(HUMAN-FEMALES OR MOTHERS).MJ.
18.(ADOLESCEN$3 OR TEEN$3).TI,AB.
19.16 OR 17 OR 18
20.ADVOCACY.TI,AB.
21.ADVOCACY#.W..DE.
22.COUNSEL$4.TI,AB.
23.COUNSELING#.W..DE.
24.(SOCIAL ADJ WORK).TI,AB.
25.MENTOR$3.TI,AB.
26.MENTOR#.W..DE.
27.(CRISIS ADJ INTERVENTION).TI,AB.
28.CRISIS-INTERVENTION#.DE. OR CRISIS-INTERVENTION-SERVICES#.DE.
29.(RISK ADJ ASSESSMENT).TI,AB.
30.RISK-ASSESSMENT#.DE.
31.(SOCIAL ADJ WELFARE).TI,AB.
32.SOCIAL-CASEWORK#.DE.
33.(SOCIAL ADJ SUPPORT).TI,AB.
34.SOCIAL-SUPPORT#.DE.
35.(HELP ADJ SEEKING).TI,AB.
36.HELP-SEEKING-BEHAVIOR#.DE.
37.(GIV$3 NEAR INFORMATION).TI,AB.
38.(GIV$3 NEAR ADVICE).TI,AB.
39.(PATIENT ADJ EDUCATION).TI,AB.
40.CLIENT-EDUCATION#.DE. OR HEALTH-EDUCATION#.DE.
41.SAFETY.TI,AB.
42.SAFETY#.W..DE.
43.(WOMENS ADJ HEALTH).TI,AB.
44.20 OR 21 OR 22 OR 23 OR 24 OR 25 OR 26 OR 27 OR 28 OR 29 OR 30 OR 31 OR 32 OR 33 OR 34 OR 35 OR 36 OR 37 OR 38 OR 39 OR 40 OR 41 OR 42 OR 43
45.15 AND 19 AND 44

15.10 BNID SEARCH STRATEGY

British Nursing Index, (BNID), searched 1994 to 18 August 2008

1.(BATTERED ADJ WOMEN).TI,AB.
2.DOMESTIC-VIOLENCE.DE.
3.(ABUS$ NEAR (WOM$ OR SPOUS$)).TI,AB.
4.(ABUS$ NEAR (PARTNER$ OR WIFE OR WIVES)).TI,AB.
5.(BATTER$ NEAR (PARTNER$ OR WIFE OR WIVES)).TI,AB.
6.(BATTER$ NEAR (WOM$ OR SPOUS$)).TI,AB.
7.(VIOLEN$ NEAR (PARTNER$ OR WIFE OR WIVES)).TI,AB.
8.(VIOLEN$ NEAR (WOM$ OR SPOUS$)).TI,AB.
9.(VIOLEN$3 NEAR DAT$3).TI,AB.
10.1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9
11.(CHILD ADJ ABUSE).TI,AB.
12.CHILD-ABUSE-AND-NEGLECT.DE. OR CHILD-ABUSE-SEXUAL.DE.
13.10 NOT (11 OR 12)

15.11 HMIC SEARCH STRATEGY

Health Management Information Consortium, (HMIC), searched 1979 to 18 August 2008
1.((violen* near dat*)or(violen* near domestic)or(violen* near family)) or ((violen* near spous*)or(violen* near partner*)or(violen* near wi*)) or ((abuse* near partner*)or(abuse* near wi*)or(violen* near wom?n)) or ((batter* near wi*)or(abuse* near wom?n)or(abuse* near spous*)) or ((batter* near wom?n)or(batter* near spous*)or(batter* near partner*))
2.(child* abuse)or(child* sexual abuse)
3.#1 not #2

15.12 MIDRS SEARCH STRATEGY

Midwives Information and Resource Index, (MIDRS), searched 1986 to December 2006
(batter* or abuse* or violen*) and (wom* or spous* or partner* or wife or wives or domestic or dating) and not (child* abuse or child* sexual abuse)