

**Campbell Systematic Reviews**

2006:10

First published: 11 August, 2006

Last updated: 22 August, 2006

# **Cognitive-Behavioural Interventions for Children Who Have Been Sexually Abused**

Geraldine Macdonald, Julian Higgins, Paul Ramchandani



**THE CAMPBELL COLLABORATION**

# Colophon

---

<b>Title</b>	Cognitive-behavioural interventions for children who have been sexually abused
<b>Institution</b>	The Campbell Collaboration
<b>Authors</b>	Macdonald, Geraldine Higgins, Julian Ramchandani, Paul
<b>DOI</b>	10.4073/csr.2006.10
<b>No. of pages</b>	60
<b>Last updated</b>	22 August, 2006

---

<b>Citation</b>	Macdonald G, Higgins J, Ramchandani P. Cognitive-behavioural interventions for children who have been sexually abused. Campbell Systematic Reviews 2006:10 DOI: 10.4073/csr.2006.10
<b>Co-registration</b>	This review is co-registered within both the Cochrane and Campbell Collaborations. A version of this review can also be found in the Cochrane Library.
<b>Keywords</b>	

---

<b>Contributions</b>	Geraldine Macdonald (GM), Paul Ramchandani (PM) and Julian Higgins (JH) each contributed to all aspects of the review. GM and PR selected studies for inclusion in the review and extracted data from the included studies. JH, GM and PR entered data in RevMan. GM and JH took primary responsibility for assessing the methodological quality of studies, for describing them and analysing the data. GM and PR took responsibility for drafting the discussion and identifying issues for research and practice.
<b>Support/Funding</b>	Northern Ireland R & D, United Kingdom SFI Campbell, The Danish National Centre of Social Research, Denmark
<b>Potential Conflicts of Interest</b>	None known.

---

<b>Corresponding author</b>	Geraldine Macdonald Cochrane Developmental, Psychosocial and Learning Problems Group School for Sociology, Social Policy & Social Work Queen's University Belfast 6 College Park Belfast, Northern Ireland, BT7 1LP United Kingdom Telephone: +44 028 9097 1489 E-mail: <a href="mailto:Geraldine.Macdonald@qub.ac.uk">Geraldine.Macdonald@qub.ac.uk</a>
-----------------------------	--

# Campbell Systematic Reviews

---

**Editors-in-Chief** Mark W. Lipsey, Vanderbilt University, USA  
Arild Bjørndal, Norwegian Knowledge Centre for the Health Services &  
University of Oslo, Norway

## **Editors**

*Crime and Justice* David B. Wilson, George Mason University, USA

*Education* Chad Nye, University of Central Florida, USA  
Ralf Schlosser, Northeastern University, USA

*Social Welfare* Julia Littell, Bryn Mawr College, USA  
Geraldine Macdonald, Queen's University, UK & Cochrane Developmental,  
Psychosocial and Learning Problems Group

**Managing Editor** Karianne Thune Hammerstrøm, The Campbell Collaboration

## **Editorial Board**

*Crime and Justice* David Weisburd, Hebrew University, Israel & George Mason University, USA  
Peter Grabosky, Australian National University, Australia

*Education* Carole Torgerson, University of York, UK

*Social Welfare* Aron Shlonsky, University of Toronto, Canada

*Methods* Therese Pigott, Loyola University, USA  
Peter Tugwell, University of Ottawa, Canada

---

The Campbell Collaboration (C2) was founded on the principle that systematic reviews on the effects of interventions will inform and help improve policy and services. C2 offers editorial and methodological support to review authors throughout the process of producing a systematic review. A number of C2's editors, librarians, methodologists and external peer-reviewers contribute.

The Campbell Collaboration  
P.O. Box 7004 St. Olavs plass  
0130 Oslo, Norway  
[www.campbellcollaboration.org](http://www.campbellcollaboration.org)

## Cover sheet

### Title

Cognitive-behavioural interventions for children who have been sexually abused (For publication)

### Reviewers

Macdonald GM, Higgins JPT, Ramchandani P

### Dates

Date edited: 02/11/2006

Date of last substantive update: 16/08/2006

Date of last minor update: 22/08/2006

Date next stage expected: / /

Protocol first published: Issue 1, 2000

Review first published: Issue 4, 2006

**Contact reviewer:** Prof Geraldine Macdonald  
Co-ordinating Editor Cochrane Developmental, Psychosocial and Learning  
Problems Group  
School for Sociology, Social Policy & Social Work  
Queen's University Belfast  
6 College Park  
Belfast, Northern Ireland  
UK  
BT7 1LP  
Telephone 1: +44 028 9097 1489  
Facsimile: +44 028 9066 5465  
E-mail: Geraldine.Macdonald@qub.ac.uk

### Internal sources of support

None

### External sources of support

Northern Ireland R & D, UK

Nordic Campbell Center, DENMARK

### Contribution of reviewers

Geraldine Macdonald, Paul Ramchandani and Julian Higgins each contributed to all aspects of the review. GM and PR selected studies for inclusion in the review and extracted data from the included studies. JH, GM and PR entered data in RevMan. GM and JH took primary responsibility for assessing the methodological quality of studies, for describing them and analysing the data. GM and PR took responsibility for drafting the discussion and identifying issues for research and practice.

**Acknowledgements**

Thanks to Dr Jane Dennis and Jo Abbott for their patience and support during the long gestation period of this review. Without Dr Dennis's help the review would have been delayed still further. Thanks also to editorial and external peer reviewers whose comments helped strengthen the product. Especial thanks are due to Dr Liz McWhirter, Department of Health and Social Services and Public Safety, Northern Ireland, whose vision is not only responsible for this review, but also for the growing portfolio of reviews that this particular Group nurtures to publication.

**Potential conflict of interest**

None known.

## What's new

### Dates

Protocol first published:	Issue 1, 2000
Review first published:	Issue 4, 2006
Date of last substantive update:	16/08/2006
Date of last minor update:	22/08/2006
Date review re-formatted:	27/10/1999
Date new studies sought but none found:	/ /
Date new studies found but not yet included/excluded:	/ /
Date new studies found and included or excluded:	/ /
Date reviewers' conclusions section amended:	/ /
Date comment/criticism added:	/ /
Date response to comment/criticism added:	/ /

## **Synopsis**

The sexual abuse of children is a substantial social problem which affects large numbers of children and young people worldwide. For many children, but not all, it can result in a range of psychological and behavioural problems, some of which can continue into adulthood. Knowing what is most likely to benefit children already traumatised by these events is important. This review aimed to assess the efficacy of cognitive-behavioural approaches (CBT) in addressing the immediate and longer-term sequelae on children who have been sexually abused. Ten studies were identified that met the inclusion criteria for the review in which a total of 847 children participated. The evidence suggests that CBT may have a positive impact on the sequelae of child sexual abuse, but most results were statistically non-significant. Implications for practice and further research are noted.

## Abstract

### Background

Despite differences in perceptions of what constitutes child sexual abuse there is a general consensus amongst clinicians and researchers that this is a substantial social problem which affects large numbers of children and young people worldwide. The effects of sexual abuse manifest themselves in a wide range of symptoms, including fear, anxiety, post-traumatic stress disorder and behaviour problems such as externalising or internalising, or inappropriate sexual behaviours. Child sexual abuse is associated with increased risk of psychological problems in adulthood. Knowing what is most likely to benefit children already traumatised by these events is important.

### Objectives

The aim of this review was to assess the efficacy of cognitive-behavioural approaches (CBT) in addressing the immediate and longer-term sequelae on children who have been sexually abused.

### Search strategy

The Cochrane Central Register of Controlled Trials (CENTRAL) (Issue 5, 2005), MEDLINE (1966 - November 2005); EMBASE (1980 - November 2005); CINAHL (1982 - November 2005), PsycINFO (1897 - November 2005); LILACS (1982 - November 2005); SIGLE (1980 to November 2005) and the register of the Cochrane Developmental, Psychosocial and Learning Problems Group (November 2005) were searched.

### Selection criteria

Included studies were randomised or quasi-randomised controlled trials investigating the efficacy of cognitive behavioural therapy on children and adolescents up to age 18 years who had experienced sexual abuse.

### Data collection & analysis

Titles and abstracts identified in the search were independently assessed for eligibility by two reviewers (GM and PR). Data were extracted and entered into REVMAN (JH and GM), and synthesised and presented in both written and graphical form (forest plots).

### Main results

Ten trials, including 847 participants, were included in this review. Data suggest that CBT may have a positive impact on the sequelae of child sexual abuse, but most results were statistically non-significant.

### Reviewers' conclusions

The review confirms CBT's potential as a means of addressing the adverse consequences of child sexual abuse, but highlights the tenuousness of the evidence base and the need for more carefully conducted and better reported trials.

## Background

Child sexual abuse refers not to a disease or medical condition but to an event or series of events in a child's life. Perceptions of what constitutes sexual abuse differ as do the definitions used by researchers and others. Despite these differences there is a general consensus amongst clinicians and researchers that this is a substantial social problem which affects large numbers of children, of both sexes, of all ages, and across culture and social class (Finkelhor 1994, Prentky 1996). Methodological problems, including those of definition, mean that estimates of the incidence and prevalence of child sexual abuse vary considerably. Most indicate that girls are more likely to be victims than boys, but women are more frequently participants in research studies and some studies suggest that the sexual abuse of boys may be almost as common (e.g. Dube 2005). Estimates of prevalence rates range from 20% to 32% for females and between 4% and 76% for males (Finkelhor 1994, Holmes 1998, Briere 2003).

### *Sequelae of sexual abuse*

The consequences of sexual abuse on the social and emotional wellbeing of children and on their development are increasingly well documented. Many, but not all, children who have been sexually abused develop significant mental health difficulties related to this form of abuse. Cross-sectional studies have pointed to a number of factors which appear to influence the extent and severity of these effects, such as age of child, frequency and duration of abuse, severity of abuse and the relationship of child to perpetrator (see Friedrich 1986). A growing number of longitudinal studies shed some light on the likely developmental trajectory of problems over time and on those factors which limit adverse consequences and/or aid recovery (Oates 1994, Tebutt 1997, Puttnam 2003, Swanston 2003). Common symptoms include fear, anxiety, low mood, and these are often the focus of interventions. It is helpful to utilise a developmental perspective when considering the effects of sexual abuse, as different problems will manifest themselves depending on the age of the affected child. For example, pre-school children are likely to experience anxiety, nightmares and externalising and inappropriate sexual behaviours (see Kendall-Tackett 1993, Trickett 1997). In school-age children, difficulties may manifest themselves as school problems, hyperactivity and nightmares, whereas adolescents are more likely to suffer from depression, prominent anxiety, suicidal or self-injurious behaviour or substance misuse. It is important to remember that a significant number of children appear not to demonstrate any of these psychological sequelae. A proportion of these may develop problems later in their psychological or social functioning (so-called 'sleeper effects'). Some may never present any problems.

### *Impact on adult functioning and use of services*

Not all victims of sexual abuse have consequent psychological problems throughout their life. However there is an association between having suffered such a trauma in childhood and experiencing higher rates of a wide range of problems in psychological and social functioning in adult life. Many of these difficulties are similar to those reported by children who have been more recently abused, including: depression, anxiety, phobias (Molnar 2001), low self-esteem and relationship and parenting difficulties (Green 1993). Young women who have been sexually abused have been reported to be at increased risk of engaging in high risk sexual behaviour (Farmer 1998) and experiencing higher rates of sexual re-victimisation (Nelson 2002). These consequences are reported by both men and women (Banyard 2004, Dube 2005). Finally, a small but important minority of abuse victims go on sexually to abuse others. It is not clear whether these outcomes are specific to the experience of being sexually abused, or related to the other difficulties that children in these situations often face. Some studies suggest that being brought up witnessing or experiencing intra-familial violence may combine with the experience of sexual abuse to increase the risk of a young man subsequently abusing others (Skuse 1998). Longer-term prospective

studies testing and examining these consequences are awaited.

The rationale for interventions for children who have been sexually abused is that successful intervention may not only reduce the psychological and social impact of sexual abuse for a victim and their family, but also modify the impact on future generations, through improved functioning as a parent, or by reducing the number of potential abusers for future generations.

### ***Cognitive-behavioural approaches***

Cognitive-behavioural approaches derive philosophically, theoretically and empirically from four theories of learning: respondent conditioning (associative learning), operant conditioning (the effect of the environment on patterns of behaviour, particularly reinforcement and punishment), observational learning (learning by imitation) and cognitive learning (the impact of thought patterns on feelings and behaviour). They combine to provide an integrated approach to assessment and intervention which pays careful attention to the developmental and social contexts in which learning occurs. In the treatment of children who have been sexually abused, cognitive-behavioural approaches focus particularly on the meaning of events for children and non-offending parents, endeavouring to identify and address maladaptive cognitions (e.g. being permanently 'soiled'), misattributions (e.g. feelings of blame and responsibility), and low self-esteem. In addition, interventions drawn from respondent, operant and observational learning paradigms are used to address more overtly behavioural problems such as externalising behaviours (aggression or 'acting out'), internalising behaviours (anxiety, self-blame or deprecation) or sexualised behaviour, usually mediated through the involvement of a/the parent not responsible for the abuse.

Cognitive-behavioural approaches also have a promising record of experimental evidence of their effectiveness in dealing with a wide range of emotional and behavioural problems, many of which feature in the symptomatology of children who have been sexually abused, e.g. anxiety ([Kendall 1994](#)), internalising and externalising behaviour ([Harrington 1998](#), [Kazdin 1989](#)) and post-traumatic stress symptoms ([Deblinger 1996](#)). Conceptually they provide a broad, evidence-based framework for assessing the effects of sexual abuse on personal, inter-personal and familial relations, and planning interventions tailored to individual circumstances. As a focussed, time-limited form of intervention it may also be a cost-effective way of helping a larger number of children than currently receive help.

Previous reviews within the field ([Finkelhor 1995](#), [Stevenson 1999](#)) suggest that cognitive-behavioural interventions, as part of a broader psychosocial intervention, may be an effective form of treatment for sexually abused children. However, these reviews have included studies of a wide range of methodological type, and have not selected studies on the basis of methodological rigour. They have also included a range of therapeutic interventions.

## **Objectives**

The aim of this review was to assess the efficacy of cognitive-behavioural approaches in treating the immediate and longer-term sequelae of child sexual abuse.

## **Criteria for considering studies for this review**

### **Types of studies**

Studies were eligible for the review if the allocation of study participants to experimental or control groups was by random allocation or quasi-random allocation i.e. by day of week, case number or alphabetical order.

Studies comparing cognitive behaviour therapy versus treatment as usual (referred to in the protocol as 'another intervention') with or without placebo control, and studies comparing one intervention versus control were included.

There were no language restrictions.

### **Types of participants**

Children and adolescents up to age 18 years who have experienced sexual abuse. The original protocol said the abuse should have occurred in the 12 months before referral. The reviewers subsequently removed this restriction as lacking a sufficiently clear rationale.

### **Types of interventions**

Interventions described by the authors as behavioural or cognitive-behavioural or that described the use of cognitive-behavioural interventions.

Treatments may or may not include parents.

### **Types of outcome measures**

A. Psychological functioning of child:

- i) Depression
- ii) Post-traumatic stress disorder
- iii) Anxiety

B. Child Behaviour problems

- i) Sexualised behaviour
- ii) Externalising behaviour (e.g. aggression, 'acting out')

C. Future offending behaviour

- i) Of child when adolescent and/or adult.

D. Parental skills and knowledge

- i) Of child sexual abuse and its (possible) consequences
- ii) Belief in their child's story
- iii) Accurate attributions for their child's behaviour or psychological problems
- iv) Behaviour management skills

Rating scales. A wide range of instruments are available to measure behavioural and psychosocial problems associated with the consequences of child sexual abuse. These instruments vary in quality and validity. For this review the minimum standards for the inclusion of data from outcome instruments were i) that the psychometric properties of the instrument had been described in a peer-reviewed journal; ii) that the instrument was either (a) a self-report, or (b) completed by an independent rater or relative.

## **Search strategy for identification of studies**

The following electronic databases were searched:

Cochrane Central Register of Controlled Trials (CENTRAL) to Issue 3, 2005  
MEDLINE: 1966 to November 2005

EMBASE: 1980 to November 2005  
CINAHL: 1982 to November 2005  
PsycINFO: 1887 to week 4 November 2005  
LILACS: 1982 to 2005  
SIGLE: 1980 to 2005

The full search strategies for all databases appear below. Appropriate trials filters were added to each strategy where necessary.

CENTRAL, published on the Cochrane Library, was searched to Issue 3, 2005, using the following terms:

#1 MeSH descriptor CHILD ABUSE explode trees 1, 2 and 3  
#2(CHILD\* in All Text near/6 ABUSE\* in All Text)  
#3 (SEX\* in All Text near/6 ABUSE\* in All Text)  
#4 MeSH descriptor INCEST explode tree 1  
#5 INCEST\* in All Text  
#6 (SEX\* in All Text near/6 OFFENC\* in All Text)  
#7 (SEX\* in All Text near/6 CHILD\* in All Text)  
#8 (SEX\* in All Text near/6 OFFENS\* in All Text)  
#9 ( ( ( ( ( (#1 or #2) or #3) or #4) or #5) or #6) or #7) or #8)  
#10 MeSH descriptor CHILD explode tree 1  
#11 CHILD\* in All Text  
#12 INFANT\* in All Text  
#13 TEENAGE\* in All Text  
#14 ADOLESCEN\* in All Text  
#15 PRESCHOOL\* in All Text  
#16 PRE-SCHOOL\* in All Text  
#17 BABY in All Text  
#18 BABIES in All Text  
#19 ( ( ( ( ( ( (#10 or #11) or #12) or #13) or #14) or #15) or #16) or #17) or #18)  
#20 (#19 and #9)  
#21 MeSH descriptor PSYCHOTHERAPY explode tree 1  
#22 PSYCHOTHERAP\* in All Text  
#23 THERAP\* in All Text  
#24 ( (#21 or #22) or #23)  
#25 (#20 and #24)

MEDLINE 1966 to November 2005

1 child abuse/ or child abuse, sexual/  
2 (child\$ adj5 abuse\$.tw.  
3 (sex\$ adj5 abuse\$.tw.  
4 Incest/  
5 incest\$.tw.  
6 (sex\$ adj5 offenc\$.tw.)  
7 (sex\$ adj5 child\$.tw.  
8 (sex\$ adj5 offens\$.tw.  
9 or/1-8  
10 adolescent/ or child/ or child, preschool/ or infant/

11 (child\$ or infant\$ or teenage\$ or adolescen\$ or preschool\$ or pre-school\$ or baby or babies).tw.  
12 or/10-11)  
13 Cognitive Therapy/  
14 psychotherap\$.tw.  
15 therap\$.tw.  
16 or/13-15  
17 9 and 12 and 16

CINAHL 1982 to November 2005

1 (child\$ adj5 abuse\$.tw.  
2 (sex\$ adj5 abuse\$.tw.  
3 incest\$.tw.  
4 (sex\$ adj5 offenc\$.tw.  
5 (sex\$ adj5 child\$.tw.  
6 (sex\$ adj5 offens\$.tw.  
7 INCEST/  
8 child abuse/ or child abuse, sexual/  
9 or/1-8  
10 adolescence/ or exp child/  
11 (child\$ or infant\$ or teenage\$ or adolescen\$ or preschool\$ or pre-school\$ or baby or babies).tw.  
12 or/10-11  
13 COGNITIVE THERAPY/  
14 psychotherap\$.tw.  
15 therap\$.tw.  
16 or/13-15  
17 9 and 12 and 16

EMBASE 1980 to November 2005

1 (child\$ adj5 abuse\$.tw.  
2 (sex\$ adj5 abuse\$.tw.  
3 incest\$.tw.  
4 (sex\$ adj5 offenc\$.tw.  
5 (sex\$ adj5 child\$.tw.  
6 (sex\$ adj5 offens\$.tw.  
7 incest/  
8 Child Abuse/  
9 or/1-8  
10 Child/  
11 adolescent/ or infant/  
12 (child\$ or infant\$ teenage\$ or adolescen\$ or preschool\$ or pre-school\$ or baby or babies).tw.  
13 or/10-12  
14 psychotherapy/  
15 psychotherap\$.tw.  
16 therap\$.tw.  
17 or/14-16  
18 9 and 13 and 17

PsycINFO 1887 to Week 4 November 2005

- #1 ("Child-Abuse" in MJ,MN)
- #2 (( child\* near abuse\* )or( sex\* near abuse\*))
- #3 ("Incest-" in MJ,MN)
- #4 (( incest\* )or( sex\* near offenc\* )or( sex\* near child\* ))
- #5 (sex\* near offens\*)
- #6 ((sex\* near offens\*) or (( incest\* )or( sex\* near offenc\* )or( sex\* near child\* )) or ("Incest-" in MJ,MN) or (( child\* near abuse\* )or( sex\* near abuse\* )) or ("Child-Abuse" in MJ,MN))
- #7 (( child\* )or( infant\* )or( teenage\* ))
- #8 (( adolescen\* )or( preschool\* )or( pre-school\* ))
- #9 (( baby )or( babies ))
- #10 ((( baby )or( babies )) or (( adolescen\* )or( preschool\* )or( pre-school\* )) or (( child\* )or( infant\* )or( teenage\* )))
- #11 ("Cognitive-Behavior-Therapy" in MJ,MN)
- #12 psychotherap\*
- #13 therap\*
- #14 ((therap\*) or (psychotherap\*) or ("Cognitive-Behavior-Therapy" in MJ,MN))
- #15 ((therap\*) or (psychotherap\*) or ("Cognitive-Behavior-Therapy" in MJ,MN)) and ((( baby )or( babies )) or (( adolescen\* )or( preschool\* )or( pre-school\* )) or (( child\* )or( infant\* )or( teenage\* ))) and ((sex\* near offens\*) or (( incest\* )or( sex\* near offenc\* )or( sex\* near child\* )) or ("Incest-" in MJ,MN) or (( child\* near abuse\* )or( sex\* near abuse\* )) or ("Child-Abuse" in MJ,MN))

SIGLE 1980 to November 2005

- #1 ( child\* near abuse\* )or( sex\* near abuse\* )or( incest\* )
- #2 ( sex\* near offenc\* )or( sex\* near child\* )or( sex\* near offens\* )
- #3 (( sex\* near offenc\* )or( sex\* near child\* )or( sex\* near offens\* )) or (( child\* near abuse\* )or( sex\* near abuse\* )or( incest\* ))
- #4 ( child\* )or( infant\* )or( teenage\* )
- #5 ( adolescen\* )or( preschool\* )or( pre-school\* )
- #6 ( baby )or( babies )
- #7 (( adolescen\* )or( preschool\* )or( pre-school\* )) or (( child\* )or( infant\* )or( teenage\* )) or (( baby )or( babies ))
- #8 ( psychotherap\* )or( therap\* )
- #9 ((( sex\* near offenc\* )or( sex\* near child\* )or( sex\* near offens\* )) or (( child\* near abuse\* )or( sex\* near abuse\* )or( incest\* ))) and (( psychotherap\* )or( therap\* )) and ((( adolescen\* )or( preschool\* )or( pre-school\* )) or (( child\* )or( infant\* )or( teenage\* )) or (( baby )or( babies )))

LILACS 1982 to November 2005

((child\$ abuse\$) OR (sex\$ abuse\$) OR (incest\$) or (sex\$ offen\$) OR (sex\$ child\$)) [Words] and ((therap\$) OR (psychotherap\$) OR (cognitiv\$))

References in previous reviews and studies were also checked. Authors and known experts were contacted to identify any additional or unpublished data. Efforts were made to establish contacts in countries in which English is not the dominant language.

## Methods of the review

### *Selection of studies*

Two authors (GM and PR) independently selected studies for inclusion in the review. No disagreements needed to be resolved.

### **Data extraction and data management**

Data were independently extracted by two of the three authors (GM and PR). Any disagreements or uncertainties were resolved by discussion. All decisions were documented and where necessary, authors of studies were contacted to assist in resolving problems.

### **Assessment of methodological quality**

To assess concealment of allocation to intervention groups, two authors (GM and JH) independently assigned each selected study to the following categories described in the Cochrane Handbook ([Higgins 2005](#)):

A indicates adequate concealment of the allocation (for example, by telephone randomisation, or use of consecutively numbered, sealed, opaque envelopes).

B indicates uncertainty about whether the allocation was adequately concealed (for example, where the method of concealment is not known).

C indicates that the allocation was definitely not adequately concealed (for example, open random number lists or quasi-randomisation such as alternate days, odd/even date of birth, or hospital number).

The following items were also assessed as potential sources of bias: blinding of participants and caregivers, blinding of outcome assessment, extent of drop-out or exclusions. We also identified those studies that used Intention to Treat analyses. Our assessment of the methodological quality of included studies can be found in Additional [Table 03](#).

### **Measurement of treatment effect**

For binary outcomes, for example, 'attempted suicide' or 'not attempted suicide', a standard estimation of the odds ratio with the 95% confidence interval was calculated. Numbers needed to treat were not calculated due to the small number of studies.

Continuous data were analysed where (i) means and standard deviations were available or calculable and (ii) there was no clear evidence of skew in the distribution (mean less than 1 standard deviation from an upper or lower bound) if the study was small (fewer than 20 participants per group). Where standard deviations were not given directly these were calculated using test statistics wherever possible. Where scales were measuring the same clinical outcomes in different ways mean differences were standardised in order to combine results across scales.

Where an outcome was assessed using a measure with sub-scales we used the total score, providing the full scale addressed the outcome of interest. Otherwise we used the most relevant sub-score. For example, when assessing the impact of CBT on anxiety we used the total score for the Revised Children's Manifest Anxiety Scale (RCMAS) rather than the scores for any of its subscales which are designed to assess the impact of intervention on particular aspects such as physiological anxiety or concentration anxiety. When assessing the impact of CBT on children's behaviour we used the Externalising sub-scale of the Child Behavior Checklist (CBCL); when deciding between State anxiety and Trait anxiety we used the former as this seemed best to capture

the outcome of interest i.e. present state anxiety; when selecting one of three data sets reported for K-SADS-E (with no total score) we selected 're-experiencing' rather than 'avoidance' or 'hypervigilance'.

When a choice needed to be made between two overlapping measures of the same outcome we chose the measure that appeared most accurately to reflect the outcome of interest without reference to the results. A summary of measures used by trialists and those used in this review can be found in Additional [Table 04](#). See also Description of Studies.

### **Assessment of heterogeneity**

Inconsistency of findings across studies was assessed using an  $I^2$  statistic, with strength of evidence against a common effect of CBT underlying all studies in a metaanalysis assessed using a standard test for heterogeneity.

### **Data synthesis (meta-analysis).**

Random effects meta-analyses were performed, and are illustrated within the review using standard forest plots. In studies with more than one experimental group, these arms were combined to form a single group, and appropriate summary statistics calculated as if they had always been so ([Deblinger 2001](#), [King 2000](#)).

### **Subgroup analyses and investigation of heterogeneity**

Investigation of heterogeneity was not undertaken because the small number of included studies provided insufficient power reliably to identify correlated predictors. See also Additional [Table 02](#) for information about future updates of the review.

### **Sensitivity analyses.**

Primary analyses were based on available data from all included studies relevant to the comparison and outcome of interest. Two studies were randomised by group rather than by individual, but no information was available on group size or on intraclass correlation to allow us to perform an adjusted analysis to account for potential clustering. We assess that the greatest plausible effect this clustering could have would be an underestimate of standard error by about 30% (based on a group size of 10, and an intraclass correlation coefficient of 0.1, giving a design effect (variance inflation factor) of 1.9). We performed sensitivity analyses for any statistically significant meta-analyses including cluster-randomised studies, using these highly conservative assumptions. No change in statistical significance of the meta-analysis was observed. Other planned sensitivity analyses designed to examine the impact on results of the quality of data and approach to analysis were not conducted due to the paucity of data. See Additional [Table 02](#) for further information.

## **Description of studies**

The search identified 377 records of potential trials. Following assessment of these titles and abstracts 14 full text copies were obtained. Of these, ten studies ( twelve papers) were assessed as meeting the eligibility criteria.

### **Excluded studies**

Three studies were excluded, two because they were not randomised or quasi-randomised ([Verleur 1986](#), [Downing 1988](#)) and one compared cognitive behavioural therapy with another experimental treatment ([Jaberghaderi 2004](#)).

### **Location of studies**

All but one of the studies (which was conducted in Australia (King 2000)) were conducted in the USA.

### **Participants**

Study authors typically report data for study completers rather than for those participants recruited (for example Cohen 1996/7).

Two studies focused solely on girls who had been sexually abused (Burke 1988, Celano 1996). The remaining studies included both boys and girls, with the percentage of boys ranging from 11% (Berliner 1996) to 42% (Cohen 1996/7) (See table of included studies).

Four studies set similar inclusion criteria for age: 7-13 (Deblinger 1999), 8-13 (Burke 1988, Celano 1996), 8-14 (Cohen 2004). One study was concerned with preschoolers (boys and girls aged 3-6 Cohen 1996/7). Inclusion criteria for the other six studies ranged from children aged 2-8 (Deblinger 2001) to children aged 4-13 (Berliner 1996), 5-17 (King 2000), 6-17 (Dominguez 2001) and 7-15 (Cohen 1998).

All trials made the independent substantiation of sexual abuse an inclusion criterion. Most set cut-off points on the time of last episode of abuse as an inclusion criteria, ranging from 6 months (Cohen 1996/7, Cohen 1998) to 2 or 3 years (Burke 1988, Celano 1996, King 2000). Whilst Deblinger 2001 did not set a time limit the authors report that the mean age of the children was 5.45 (SD=1.47) and the mean age of first experience of sexual abuse was 4.5 (SD=1.47) based on mothers' estimates. The report by Berliner 1996 did not specify inclusion or exclusion criteria, but all participants were said to have provided statements, substantiated by independent assessment, that they had been sexually abused.

All studies had inclusion criteria that specified contact sexual abuse. The range of abuse experienced by participants was broad, and differently reported, but the following picture of participants emerged. Most were abused by men known to them. The majority were family members. In four studies, approximately half the children and young people had experienced oral, vaginal or anal penetration (Berliner 1996, Celano 1996, Cohen 1998, Dominguez 2001). In the study dealing with youngest participants the percentage experiencing vaginal or anal intercourse was 26% (Cohen 1996/7). In the study of children aged 2-8 the number reported to have experienced penile penetration was 16% (Deblinger 2001). Participants in all studies range from those who had experienced one incident of abuse to those who had experienced multiple incidents, sometimes over many years. Many participants also reported the use of force, or threat of force. Not all studies reported detailed abuse data (e.g. Burke 1988, Deblinger 2001).

See Additional Table 01 for a profile of participants in each study.

Five studies reported the presence of particular symptomatology thresholds as an inclusion criterion. Burke 1988 required reports of behavioral difficulties in participants as indicated in the records of the child's assigned caseworker, together with a pre-treatment score on the Child Depression Inventory of at least one standard deviation above the mean score obtained from a normative sample of girls aged 8-13 years. Cohen 1996/7 required a minimal level of symptomatology defined as a Weekly Behavior Report Total Behavior score of more than 7 or any sexually inappropriate behavior reported on the Child Sexual Behavior Inventory. Cohen 2004 stipulated that participants had to meet five criteria for sexual abuse-related DSM-IV-defined PTSD, including at least one in each of the three clusters (re-experiencing, avoidance or numbing, and hyperarousal). Deblinger 1999 required the presence of 3 post-traumatic stress symptoms (PTSD), including at least one symptom of avoidance or re-experiencing phenomenon.

Investigators decided to take both children who met full DSM-III-R criteria for PTSD and those with partial PTSD symptoms because of the possibility of delayed onset of episodic course. [King 2000](#) required that the children met diagnostic criteria for PTSD or provided evidence of high risk of developing the disorder.

## **Interventions**

### *Group treatments*

In two studies, therapy was provided to children only on a group basis ([Burke 1988](#), [Berliner 1996](#)). These studies compared the efficacy of CBT to a waitlist control ([Burke 1988](#)) and 'conventional sexual abuse specific group therapy' ([Berliner 1996](#)) respectively. One study provided therapy to children and their mothers in separate groups ([Deblinger 2001](#)). This study compared CBT with supportive group therapy (parents) and an interactive CBT approach with a didactic, information based approach for children.

### *Individual treatments*

The remainder provided individual therapy. [Celano 1996](#) compared the efficacy of cognitive-behavioural therapy applied to children and their mothers.

Three studies compared CBT with nondirective supportive therapies ([Cohen 1996/7](#); [Cohen 1998](#); [Dominguez 2001](#)).

Two studies compared the efficacy of CBT provided for the child with CBT provided to the child and parent/family ([Deblinger 1999](#), [King 2000](#)). Both studies also used a control group (community control and waitlist respectively) and [Deblinger 1999](#) had a fourth arm which examined the efficacy of teaching parents CBT strategies for helping their child.

### *Number and content of sessions*

The group-based therapies were provided over six sessions and ten sessions respectively ([Burke 1988](#), [Berliner 1996](#)). For the experimental group Berliner augmented the conventional sexual abuse specific group therapy provided to the control group with sessions specifically explaining the nature of fear, the principles of Stress Inoculation Therapy and their application to disclosure impact and self-esteem. Burke's therapy was based primarily on classical conditioning (relaxation, imaginal exposure and behaviour rehearsal) and education, aimed at providing participants with strategies for managing negative affect.

The individual-therapies were provided from between 8 to 20 sessions (see Table of Included Studies). Participants in Celano's study ([Celano 1996](#)) had eight one hour sessions, in which therapists deployed developmentally appropriate cognitive behavioural and metaphoric techniques to address children's maladaptive beliefs, affects and behaviour. In all but two or three sessions the therapist spent half the time with the mother and half with the child. The remaining sessions were conducted conjointly. Three studies provided around one and a half hours divided between parents and child over 8 and 12 weeks respectively ([Cohen 1996/7](#); [Cohen 1998](#), [Cohen 2004](#)). CBT programmes in these studies included the use of cognitive reframing, thought stopping, positive imagery, contingency reinforcement programmes, parent management training and problem solving, together with psycho educational and supportive interventions. These interventions were also central to studies by Deblinger and King, both of which had child-, parent-, and child + parent arms. [Deblinger 1999](#) provided therapy in 12 x 45 minute sessions to participants in the parent-only and child-only arms. In the parent and child arm, therapy also entailed 12 sessions, but this time of up to 90 minutes. In King's study ([King 2000](#)), all participants each received 20 x 50 minute sessions. This means that in the parent + child arm, 40 x 50 minute sessions were provided. No information is provided by Dominguez ([Dominguez 2001](#)).

## Outcomes measures

### *Outcomes assessed using the same measure*

Child depression, child sexual behavior and child behavior were assessed using the same measures (Child Depression Inventory (CDI) (Kovacs 1981), Child Sexual Behavior Inventory (CSBI) (Friedrich 1992) and the Child Behavior Checklist (CBCL) (Achenbach 1991) respectively) in each study that looked at these outcomes (see Table 04). Where the impact of intervention on parenting practices was assessed the measure used was the Parenting Practices Questionnaire (Strayhorn 1988).

### *Outcomes assessed using different measures*

#### *Post-traumatic stress disorder (PTSD)*

Six studies (Celano 1996, Cohen 1998, Deblinger 1999, King 2000, Deblinger 2001, Cohen 2004) assessed the impact of CBT on symptoms of post-traumatic stress using six different measures. Celano 1996 and King 2000 used both the PTSD subscale of the Child Behaviour Checklist (completed by the child's parent) (Achenbach 1991) and one other measure of PTSD. Celano 1996 used a child report measure (the CITES-R (Children's Impact of Traumatic Events Scales-Revised)) (Wolfe 1991) and King 2000 used a measure administered by a research assistant (the child version of the Anxiety Disorders Interview Schedule for DSM-IV (Silverman 1996)). Two studies (Deblinger 1999, Deblinger 2001) used the Kiddie Schedule for Affective Disorders and Schizophrenia for School-Age Children - Epidemiologic version administered to parents (K-SADS-E) (Orvaschel 1982; Orvaschel 1994); one study (Cohen 2004) used the K-SADS-PL (Parent and Lifetime Version) (Kaufman 1997) and another (Cohen 1998) used the Trauma Symptom Checklist for Children (TSCC) (Briere 1996).

#### *Anxiety*

Two measures were used to assess the impact of interventions on anxiety, namely the Revised Children's Manifest Anxiety Scale (RCMAS) (Reynolds 1978) and the State-Trait Anxiety Inventory for Children (STAIC) (Spielberger 1973). Of the three studies (Burke 1988, Berliner 1996 and King 2000) using the RCMAS no data were available for inclusion from Burke. Of the studies using the STAIC we used data on STAIC-STATE (as opposed to STAIC-TRAIT) as this measures present state anxiety (Cohen 1998, Deblinger 1999, Cohen 2004).

#### *Fear*

Three measures of fear were used in four of the included studies. Berliner 1996 and Burke 1988 both used the Fear Survey Schedule for Children-Revised (FSSR-R) (Ollendick 1983). Berliner 1996 also used the Sexual Abuse Fear Evaluation Scales (SAFE) (Wolfe 1986). King 2000 used the Fear Thermometer for Sexually Abused Children (FT-SAC) (Kleinknecht 1988).

#### *Other outcomes*

Some investigators also looked at children's coping ability. King 2000 used the Global Assessment Functioning scale (GAF (APA 1987)) and an instrument developed by the investigators themselves, the Coping Questionnaire for Sexually Abused Children (CQ-SAC) and Celano used the Children's Global Assessment Scale (CGAS (Shaffer 1983)). Dominguez 2001 measured children's subjective distress using the Impact of Events Rating (IES-R (Horowitz 1979)) whilst Cohen 2004 assessed children's attributions using the Children's Attribution and Perception Scale (CAPS (Mannarino 1994)).

The Parents' Emotional Reaction Questionnaire (PERQ (Cohen 1996)) was used in two studies to

determine the impact of intervention on parental distress (Deblinger 2001, Cohen 2004). Researchers in the Celano 1996 study examined the impact of CBT on the attributions made by parents about responsibility for abuse using a scale they themselves developed, the Parental Attribution Scale (the PAS). One study examined mothers' reaction to disclosure of abuse using the Parents' Reaction to Incest Disclosure Scale (PRIDS (Everson 1989)) - which looks at parental support for the child in three areas: emotional support, belief of the child and action towards the perpetrator (Celano 1996). Cohen 2004 also looked at the parental level of support for the child and attributions about responsibility using the Parental Support Questionnaire (PAS) (Cohen 1996). Cohen 2004 also reported on the impact of intervention on parental depression using the Beck Depression Inventory (BDI (Beck 1996)).

This review reports on those measures set out in the protocol. For a complete list of measures used by study authors and those included in this review see Table 04.

## Methodological quality of included studies

Five studies had small samples sizes ranging from 25 to 49 (Burke 1988, Celano 1996, King 2000; Deblinger 2001, Dominguez 2001). A multisite trial by Cohen had a sample of 229 (Cohen 2004). The remainder ranged from 82 to 154 (Berliner 1996, Cohen 1996/7, Cohen 1998, Deblinger 1999).

Quality aspects were generally very poorly reported. Full details of our assessments are available in a quality assessment table (see Table 03).

Allocation concealment was considered adequate in only one study (Berliner 1996) and was unclear in the others. Celano 1996 reported that for interviews of the child's overall psychosocial functioning those conducting the interviews were blind to intervention assignment. Cohen 2004 reported that their independent evaluators were blind to the treatment condition of participants. It is not possible to blind participants and therapists to intervention in these trials.

Attrition rates were high, and it was often difficult to ascertain when and why participants were excluded from results tables. Three studies reported undertaking Intention to Treat analyses (Cohen 1998, King 2000, Cohen 2004).

Most studies appear to have reported on all the measures they set out to use (as far as one can tell from published reports), at all time scales. Exceptions appear to be Cohen 1998, Deblinger 1999 and Cohen 2004. Cohen 1998 did not mention their use of the Trauma Symptom Checklist for Children (TSCC) until they published their one year follow up in 2001. At this point they provide data for all time points i.e. post-treatment, 6- and 12-months follow-up. Deblinger 1999 report on only a selection of the measures they used and reported on in their initial publication. Missing from the two-year follow-up report are data on the Internalising subscale of the CBCL (not used in this review) and their measures of anxiety, the STAIC. Cohen 2004 said they used the PTSD, Psychosis, and Substance Misuse sections of the K-SADS-PL. In the table of results they report only on data relating to the PTSD section, i.e. K-SADS re-experiencing, K-SADS Avoidance and K-Sads Hypervigilance.

## Results

Primary results here involve participants included by the study authors in their analyses, many of which excluded participants due to drop-out, uncollected data or for reasons they do not report.

Each result reported is the change score in the intervention group compared to the control group.

A. Psychological functioning of child:

i) Depression

Seven studies looked at the impact of intervention on depression in children using the CDI (Kovacs 1981). Data from five studies were available in a form that could be combined in a meta-analysis. These five studies yielded an average decrease of 1.8 points on the Child Depression Inventory immediately after intervention (95% CI decrease of 4.0 to increase of 0.4;  $I^2$  inconsistency statistic = 47%; P value for heterogeneity 0.11), and three of these studies (Berliner 1996, Cohen 1998, Deblinger 1999) sustained an average decrease of 1.9 points (95% CI decrease of 3.9 to increase of 0.1;  $I^2$  = 0%; P = 0.7) after at least one year.

ii) Post-traumatic stress disorder

Six studies examined the impact of CBT on post-traumatic stress using a variety of scales (see above section on 'Outcome measures'). These studies yielded an average decrease of 0.43 standard deviations on various child post-traumatic stress disorder scales (95% CI 0.16 to 0.69;  $I^2$  = 40%; P value for heterogeneity 0.14) immediately after treatment, and two of these (Cohen 1998, Deblinger 1999) sustained a decrease of 0.50 standard deviations (95% CI 0.17 to 0.87) after at least one year.

iii) Anxiety

Six studies examined the impact of CBT on anxiety, but it was not possible to use the data provided by Burke 1988 in our meta-analysis. The other five studies, using two scales (Spielberger 1973, Reynolds 1978), yielded an average decrease of 0.21 standard deviations on various child anxiety scales (95% CI 0.02 to 0.40;  $I^2$  = 0%; P value for heterogeneity 0.89) immediately after treatment, and two of these (Berliner 1996, Cohen 1998) sustained a decrease of 0.28 standard deviations (95% CI decrease of 0.61 to increase of 0.04) after at least one year.

B. Child Behaviour problems

i) Sexualised behaviour

Five studies provided conflicting evidence on the effectiveness of CBT in the domain of child behaviour problems assessed using the Child Sexual Behavior Inventory ( $I^2$  = 67%, P value for heterogeneity 0.02) (Friedrich 1992). Two studies (Berliner 1996, Deblinger 2001) observed increases of 4.7 and 1.7 points and three (Cohen 1996/7, Cohen 1998, Cohen 2004) observed decreases, one of which was statistically significant (Cohen 1996/7). In a meta-analysis, there was no evidence of an effect on average. Three studies (Berliner 1996, Cohen 1996/7, Cohen 1998) provided longer-term data. The first of these observed a much smaller increase than the same study in the short term. Overall, the average effect was similar to that immediately after treatment, but was not statistically significant.

ii) Externalising behaviour (e.g. aggression, 'acting out')

Seven studies provided data on the Child Behaviour Checklist (CBCL) Externalising behaviour scale (Achenbach 1991). A meta-analysis of standardised differences in means (due to different scoring systems being used for the scale) did not provide evidence of the beneficial effect on average (decrease of 0.14 standard deviations, 95% CI decrease of 0.44 to increase of 0.15). However, the results were inconsistent ( $I^2$  = 62%; P value for heterogeneity 0.01), with one study observing a statistically significant increase (Berliner 1996) and one a statistically significant decrease (Deblinger 1999).

Four studies provided longer term data (Berliner 1996, Cohen 1996/7, Cohen 1998, Deblinger

1999). Again, the picture is of inconsistent findings that do not produce, on average, either a convincingly beneficial or harmful effect.

C. Future offending behaviour

i) Of child when adolescent and/or adult.

No study set out to examine this as an outcome.

D. Parental skills and knowledge

i) Of child sexual abuse and its (possible) consequences

No data were available on parental understanding of child sexual abuse.

ii) Parental belief in their child's story

Two studies (Celano 1996, Cohen 2004) used the PRIDS (Everson 1989) and PSQ (Cohen 1996) scales respectively to measure parental belief of their children and support for them. A meta-analysis of standardised differences in means gave a statistically significant increase of 0.3 standard deviations (95% CI 0.03 to 0.57).

iii) Accurate attributions for their child's behaviour or psychological problems

One study (Celano 1996) provided data on four aspects of parental attributions (PAS scale), observing small, but statistically non-significant decreases in self-blame, child-blame, perpetrator-blame and negative impact (see forest plot) (Celano 1992).

iv) Parents Emotional Reactions

Two studies used the Parent Emotional Reaction Questionnaire (Deblinger 2001, Cohen 2004) and across these a decrease of 7 points (95% CI 3.9 - 10.1) was observed.

v) Behaviour management skills

Three studies provided data on Parenting Practices Questionnaire (Strayhorn 1988) scores in the short term (Deblinger 1999, Deblinger 2001, Cohen 2004), one of which looked also at long-term effects (Deblinger 1999). A statistically significant increase of 4.4 across the two studies was observed immediately after treatment (95% CI 1.0 to 7.7) and a statistically significant increase in the single study of 11.9 after two years (95% CI 5.3 to 18.5).

## Discussion

### Overall completeness of studies and applicability of evidence

The number of studies included in this review are few, and originate, with one exception, from the United States of America. Whilst this may limit the applicability of the evidence to some health and social care settings, the evidence itself has considerable cross-cultural currency, anchored as it is on an understanding of child sexual abuse and its consequences based on learning theory. Generally, the studies appear to be representative of the range of abuse experienced by children between the ages of 3 and 17.

One of the debates in the field is whether or not 'asymptomatic' children should be included in therapy. Five of the ten studies included in this review appear to have included asymptomatic children. This may have impacted on the capacity of these small studies to reveal any differences, whether positive or negative, between the experimental and control groups. The three studies that required evidence of post-traumatic stress symptoms as an inclusion criterion demonstrated a positive impact on this aspect of child health (Deblinger 1999, King 2000; Cohen 2004). Two of the studies that stipulated a minimal level of behavioural symptomatology as an inclusion criteria,

including evidence of any sexually inappropriate behaviour (Cohen 1996/7; Cohen 2004), appeared to have some impact on externalising behaviour and/or sexualised behaviour, but the evidence is only suggestive. The other (Burke 1988) reported improvements, but did not provide data in a form that could be incorporated in the metaanalyses. Other studies that did not specifically target children with such behaviour, or with PTSD, had similar results. This may reflect similarities across study samples in symptomatology, irrespective of inclusion criteria, and the profile of abuse experienced by study participants supports this suggestion (see Additional Table 01).

### **Quality of the evidence**

The quality of current evidence about the efficacy of cognitive behavioural therapy in treating the emotional, psychological and behavioural consequences of children who have been sexually abused is poor. Studies appear to be beset with a range of methodological weaknesses which, exacerbated by poor reporting, make it difficult to draw firm conclusions. In line with other reviews, there is a suggestion that these approaches may be beneficial, compared to treatment as usual, but the strength of evidence contained within these randomised and quasi-randomised controlled trials is considerably more muted.

### **Potential biases in the review process**

We endeavoured to extract pre-specified outcomes, but there remains a high risk that the scales reported are a biased representation of those collected by the study authors (selective reporting). It is also possible that the practice in some studies of reporting the results for only those children who completed all post-treatment assessments, represents a further source of bias, though in what direction it is not possible to say. Only three studies undertook intention to treat analyses.

### **Agreement, disagreements with other studies or reviews**

The general direction of findings presented is in keeping with those of other reviews. However, this review emphasises - more clearly than other reviews or individual studies - the inherent methodological weaknesses of the available studies. This should augur more caution in the interpretation of results than is espoused by other reviewers (e.g. Cohen et al). Studies may have been well designed (Cohen et al 2004) but there are serious weaknesses in their implementation, analyses and reporting.

## **Reviewers' conclusions**

### **Implications for practice**

There is nothing in this review to detract from the general consensus that cognitive-behavioural approaches, particularly those that are trauma-focused, merit consideration as a treatment of choice for sexually abused children who are experiencing adverse consequences of that abuse. The results of the review do, however, suggest that the evidence is more equivocal than some reviewers would suggest, including those who have themselves conducted trials.

In particular, trauma-focussed cognitive-behavioural approaches are already recommended by some as part of a flexible, staged response to this problem in a number of jurisdictions ( [Jones 1999](#), [Puttnam 2003](#), [Cohen 2005b](#)). In practice, however, they are not often widely available.

### **Implications for research**

The single most important implication for research in this area is for researchers to better document and report study design and execution. Researchers should pay particular attention to reporting the method of randomisation, the history and reasons for drop-outs and exclusions throughout the course of the study. Further studies should consider focusing solely on sexually abused children who are experiencing identifiable symptoms of post-traumatic stress or other adverse consequences of sexual abuse. Studies should endeavour, wherever possible, to follow-up participants for at least one year, and preferable two, rather than the very short term (or no) follow-up periods that characterise some current studies.

More, carefully conducted trials, that consider which subgroups benefit (or not) from particular styles of treatment delivery would be helpful to clinicians (e.g. group vs individual and parent-child vs child only) as would studies which considered treatment harms more carefully.

Finally, this is an area where some observational studies of follow up in real world settings would provide important information about how symptoms develop and/or attenuate.

## Characteristics of included studies

Study ID	Methods	Participants	Interventions	Outcomes	Notes	Allocation concealment
<b>Berliner 1996</b>	RCT	154 sexually abused children aged 4-13 . 103 completed the post-treatment assessments. 87 completed the 1 year follow-up. 80 completed the 2 year follow-up assessment. 87 (84.5% of treatment completers) completed the 1 year follow-up.	Control group (n randomised unclear): Ten sessions covering: getting acquainted and establishing ground rules; feelings; family and friends (2 sessions); disclosure impact, self-esteem and sexual abuse; body awareness and sexuality (2 sessions), and prevention and termination. Experimental group (n randomised unclear): as for the Control group with i) a specific focus on explaining fear in the feelings session; (ii) the replacement of one of the family and friends sessions with one on Stress Inoculation Therapy (SIT), (iii) two sessions devoted to gradual exposure, and (iv) the application of SIT principles to sessions on disclosure impact and self-esteem.	Fear: the Fear Survey Schedule for Children-Revised (FSSC-Revised); the Sexual Abuse Fear Evaluation Scales (SAFE) and the Revised Children's Manifest Anxiety Scale (RCMAS). Behaviour: externalising (Child Behaviour Checklist-CBCL); internalising (CBCL); Social Competence (CBCL); Total Behavior Problem (CBCL). Depression: Children's Depression Inventory (CDI). Sexual Behaviour: Children's Sexual Behavior Inventory (CSBI). Depression (Children's Depression Inventory - CDI) Sexual behaviour (Child Sexual Behavior Inventory (CSBI)  Other data were collected via a Parent Information and Therapist Information form.	Random numbers table generated at the beginning of the project Overall loss of 74 children from recruitment to final assessment period. There appears to be differential attrition between groups and across outcome measures. One assumes more loss in the comparison group (which ended up with 32) than in the intervention group (final sample 48) but this is supposition.	A
<b>Burke 1988</b>	RCT	25 sexually abused girls aged 8-13	Experimental group (n randomised = 12): Six group sessions comprising: Good	Depression: Children's Depression Inventory (CDI). Anxiety: Revised Manifest	Not clear how participants were randomised. Study report says participants	B

			and bad touching; relaxation and education about anxiety; review of relaxation homework; imaginal exposure and identifying times or situations when participants felt depressed, identifying pleasurable events and 'making oneself engage in them; and developing strategies for actively dealing with anxiety provoking interactions with anyone who might attempt 'bad touching'. Control group (n randomised = 13); waitlist control	Anxiety Scale (RCMAS). Fear: Fear Survey Schedule for Children-Revised (FSSC-Revised). Behaviour: Internalising (Child Behavior Checklist - CBCL). Anxiety (Revised Children's Manifest Anxiety Scale - RCMAS); Fear (Revised Fear Survey Schedule - FSSC-R); Internalising behaviour (Child Behaviour Checklist - CBCL)	were randomly assigned within the matching constraints of age, type of abuse and amount of force used.
<b>Celano 1996</b>	RCT	49 sexually abused girls aged 8-13 and their (non-offending) female caretakers. 32 completed post-treatment assessments.	Experimental group (n randomised = 25): Recovering from Abuse Program (RAP) - eight group sessions focused on children's maladaptive beliefs, affects and behaviour along four dimensions - self-blame/stigmatisation; betrayal; traumatic sexualisation and powerlessness. Control group (n = 24). Treatment as Usual (TAU) defined as supportive, unstructured psychotherapy that sexually abused children and their mothers would	CHILDREN: Behaviour: Internalising (Child Behavior Checklist - CBCL); Externalising (CBCL). PTSD: Children's Impact of Traumatic Events Scales-Revised (CITES-R); PTSD Subscale of the CBCL. Overall psychosocial functioning: Children's Global Assessment Scale (CGAS) Behaviour (Child Behavior Checklist - CBCL); Children's Impact of Traumatic Events Scales - Revised (CITES-R); Children's Global	B

			normally receive at the clinic.	Assessment Scale (CGAS); PARENTS: Parents Reaction to Incest Disclosure Scale (PRIDS); Parental Attribution Score (PAS).		
<b>Cohen 1996/7</b>	RCT with therapist cross-over design, to control for the possibility that a particularly effective therapist in one type of treatment might unduly influence the results.	86 sexually abused children aged 3-6 and their (non-offending) parent. 67 children completed post-treatment assessments. 43 children completed all follow up assessments.	Experimental group (n randomised is unclear): Cognitive-behavioural therapy for sexually abused children (CBT-SAP). Control (n randomised is unclear): Non-directive supportive therapy (NST)	Child behaviour: externalising (Child Behaviour Checklist-CBCL); internalising (CBCL); Social Competence (CBCL); Weekly Behavior Record (WBR). Sexual Behaviour: Child Sexual Behavior Inventory (CSBI).	Used the 4-11 CBCL although some children were 3 at first measurement.	B
<b>Cohen 1998</b>	RCT	82 sexually abused children aged 7 - 15. 49 children completed post-treatment assessments.	Experimental group (n randomised = 41): Sexual Abuse Specific Cognitive behavioral therapy. For the child the focus was on depression, anxiety and associated behavioural difficulties. For the parent it focused on parental emotional distress and enhancing emotional support and behavior management. Control Group (n randomised = 41): non-specific therapy (NST) which did not provide suggestions or directive advice, but encouraged exploration of alternative attributions, behaviours and feelings via nondirective	Child behaviour: internalising (Child Behaviour Checklist-CBCL); Externalising (CBCL); Social Competence (CBCL). Anxiety: State/Trait Anxiety Inventory for Children (STAIC). Depression: Children's Depression Inventory (CDI). Sexual Behaviour: Children's Sexual Behaviour Inventory (CSBI). PTSD: Truama Symptom Checklist for Children (TSCC). Parents: Parent Satisfaction (Parental Satisfaction Questionnaire).	High attrition rates throughout the study, and not clear from what groups participants dropped out at what stage.	B

			interventions. 12 x weekly sessions, 45 minutes with the child and 45 minutes with the parent.		
<b>Cohen 2004</b>	RCT Multisite trial	229 sexually abused children aged 8 - 14 and their parents/caretakers (n=189)	Experimental group (n=114 randomised): Control group (n=115 randomised). Each group received 12 weekly individual sessions of 45 minutes each for both parent and child. Participants in the trauma-focused CBT also received 3 x joint sessions of 30 minutes. For these sessions, individual child and parent sessions were reduced to 30 minutes.	CHILDREN: Behaviour: Internalising (Child Behavior Checklist-CBCL); Externalising (CBCL); Social Competence (CBCL). Depression: Child Depression Inventory (CDI). Sexual Behaviour: Children's Sexual Behavior Inventory (CSBI). Psychiatric disorders (K-SADS--PL, using PTSD, Psychosis and Substance Use Disorders sections). Perceptions and attributions: Children's Attributions and Perceptions Scale (CAPS). PARENTS: Depression: Beck Depression Inventory (BDI); Emotional Reactions: Parents' Emotional Reactions Questionnaire (PERQ). Parenting: Parenting Practices Questionnaire (PPQ); Parental Support: Parental Support Questionnaire (revised PSQ).	B
<b>Deblinger 1999</b>	RCT	100 sexually abused children aged 7-13 suffering	Experimental Group 1 (n randomised = 25) - Child	CHILDREN Behaviour: Internalising (Child Behavior	Participants in the combined group received considerable

		<p>post-traumatic stress disorder. 90 children completed post-treatment assessments. No information on numbers of children completing follow-up assessments.</p>	<p>Intervention comprising a range of cognitive behavioural methods, including gradual exposure, modelling, education, coping and body safety training. Experimental Group 2 (n randomised = 25) - Parent Intervention providing mothers with cognitive-behavioural skills to use in responding to their children's fears and avoidance behaviours. Experimental Group 3 (n randomised = 25) - Combined Parent and Child intervention comprising individual sessions with parent and child, and combined sessions designed to facilitate parent-child communication designed, in part, to help continue therapeutic work at home. Control Group (n randomised = 25) - Community control. Participants received information about children's symptom patterns and were strongly encouraged to seek therapeutic help.</p>	<p>Checklist-CBCL); Externalising (CBCL). PTSD: PTSD section of the K-SADS-E. Depression: Child Depression Inventory (CDI). Anxiety: Stait-Trait Anxiety Inventory for Children (STAIC)/</p>	<p>more therapeutic exposure time than the other two experimental groups.</p>
<b>Deblinger 2001</b>	RCT Cluster randomised	54 sexually abused children aged 2 to 8 and their	Experimental group (n randomised unknown)	CHILDREN Behaviour: Child Behavior Checklist	B

non-offending mothers.	<p>PARENTS - 11 sessions of cognitive-behavioural therapy designed to i) help parents cope with their own emotional reaction in order to help them support their children, ii) educate them as to how to initiate and maintain open parent-child communication regarding their children's sexually abusive experiences, and iii) provide them with behaviour management skills in order to help them manage their children's behavioural difficulties. CHILDREN - 11 sessions that aimed to help children i) communicate about and cope with their feelings, ii) to identify 'okay' and 'not okay' touches and iii) to learn abuse response skills, using an interactive behavioural format.</p> <p>Control group (n randomised unknown) PARENTS- 11 sessions of supportive group therapy based on the available clinical and empirical literature regarding self-help groups. Therapists acted as supportive and empathic facilitators and the aim was to empower parents.</p>	<p>(CBCL). PTSD: PTSD section of the K-SADS-E. Sexual Behaviour: Child Sexual Behavior Inventory (CSBI-3). Ability to respond appropriately: What If Situations Test (WIST). PARENTS Behaviour (Coping) Style: Miller Behavior Style Scale (not used in the analyses). PTSD Symptoms: Posttraumatic Symptom Scale (SCL-90-R). Subjective Distress: Impact of Events Scale (IES). Parenting: Parenting Practices Questionnaire (PPQ). Emotional Reactions: Parent Emotional Reaction Questionnaire (PERQ). Social Support: Social Support Questionnaire (SSQ). Satisfaction: Therapist Satisfaction Questionnaire (TSQ). Overall functioning: Global Assessment Functioning Scale (GAF).</p>
------------------------	---	---

			Therapists did not provide specific information about cognitive coping, gradual exposure or behaviour management. CHILDREN - As above but in the control group the therapists used a didactic format, presenting age appropriate information and personal safety using pictures, stories and activity age exercises. Both approaches were manualised and all sessions lasted 1. hr 45 minutes.			
<b>Dominguez 2001</b>	RCT	32 sexually abused children and adolescents aged 6-17. 25 children completed post-treatment assessments	Experimental Group (n randomised = 22): Cognitive behavioral therapy, the primary goal of which was to teach participants new skills to manage their affective, cognitive, and behavioural responses to the traumatic events. Control Group (n randomised = 10) - Supportive treatment, designed to facilitate change via a combination of consciousness raising and corrective emotional experiences that occur in the context of a genuine, empathic relationship	CHILDREN Intrusive thoughts and avoidance behavior: Impact of Events Scale Revised (IES-R). Depression: Child Depression Inventory (CDI). At pre-treatment they also used the Youth Self Report; the Diagnostic Interview for Children and Adolescents-III-Revised and the parent completed the Child Behavior Checklist (CBCL).	7 children dropped out after first treatment session. There is a suggestion that others dropped out between recruitment and the first therapy session.	B

<b>King 2000</b>	RCT	36 sexually abused children aged 5-17 with symptoms that met diagnostic criteria for PTSD or who were at high risk of this. 28 children completed post-treatment and follow-up assessments	<p>characterised by unconditional positive regard.</p> <p>Experimental group 1 (n randomised =12): Child Cognitive-Behavioral Therapy [CCBT] comprising 20 x 50 minute sessions aimed at helping the child overcome his or her post-abuse distress and PTSD symptoms.</p> <p>Experimental Group 2 (n randomised =12): Family Cognitive-Behavioral Therapy comprising CCBT plus 20 x 50 minutes sessions for parents who were trained in child behavior management skills and parent-child communication skills.</p> <p>Control Group (n randomised =12) wait-list control. Participants were not contacted during the 24 week waiting period.</p>	<p>CHILDREN Behaviour: Internalising: (Child Behavior Checklist-CBCL); Externalising (CBCL). PTSD: PTSD section of the Anxiety Disorders Interview Schedule (ADIS, Child Version) and PTSD Subscale of the Child Behavior Checklist (CBCL) .</p> <p>Depression: Children's Depression Inventory (DPI). Fear: Fear Thermometer for Sexually Abused Children (FT-SAC). Anxiety: Revised Children's Manifest Anxiety Scale (RCMAS). Children's perceived ability to cope with abuse-related symptoms and specific anxiety-provoking situations: Coping Questionnaire for Sexually Abused Children (CQ-SAC).</p>	10 children were 'lost' during screening and consent. A further 8 dropped out during treatment, 2 from the control group, and 3 from each experimental group.	B
			Overall functioning (Clinician using the Global Assessment Functioning Scale - GAF).			



## **Characteristics of excluded studies**

<b>Study ID</b>	<b>Reason for exclusion</b>
<b>Downing 1988</b>	Not a randomised or quasi-randomised trial.
<b>Jaberghaderi 2004</b>	Other treatment control
<b>Verleur 1986</b>	Not a randomised or quasi-randomised trial. Matched comparison groups.

## References to studies

### Included studies

**Berliner 1996** {published data only}

Berliner L, Saunders BE. Treating fear and anxiety in sexually abused children: results of a controlled 2-year follow-up study. *Child Maltreatment* 1996;1(4):294-309.

**Burke 1988** {unpublished data only}

Burke MM. Short-term group therapy for sexually abused girls: a learning theory based treatment for negative affect [Phd dissertation]. Athens, Georgia: University of Georgia, 1988.

**Celano 1996** {published data only}

\* Celano M, Hazzard A, Webb C, McCall C. Treatment of traumagenic beliefs among sexually abused girls and their mothers: an evaluation study. *Journal of Abnormal Child Psychology* 1996;24(1):1-17.

**Cohen 1996/7** {published data only}

\* Cohen JA, Mannarino AP. A treatment outcome study for sexually abused preschool children: initial findings. *Journal of the American Academy of Child and Adolescent Psychiatry* 1996;35(1):42-50.

Cohen JA, Mannarino AP. A treatment study for sexually abused preschool children: outcome during a one-year follow-up. *Journal of the American Academy of Child and Adolescent Psychiatry* 1997;36(9):1228-1235.

**Cohen 1998** {published data only}

\* Cohen JA, Mannarino AP. Interventions for sexually abused children: initial treatment outcome findings. *Child Maltreatment* 1998;3(1):17-26.

Cohen JA, Mannarino AP, Knudsen K. Treating sexually abused children: 1 year follow-up of a randomized controlled trial. *Child Abuse and Neglect* 2005;29:135-145.

**Cohen 2004** {published data only}

\* Cohen JA, Deblinger E, Mannarino AP, Steer RA. A multisite, randomized controlled trial for children with sexual abuse-related PTSD symptoms. *Journal of the American Academy of Child Adolescent Psychiatry* 2004;43(4):393.

**Deblinger 1999** {published data only}

\* Deblinger E, Steer R, Lippman J. Two-year follow-up study of cognitive behavioral therapy for sexually abused children suffering post-traumatic stress symptoms. *Child Abuse and Neglect* 1999;23(12):1371-1378.

Deblinger E, Lippman J, Steer R. Sexually abused children suffering posttraumatic stress symptoms. *Child Maltreatment* 1996;1(4):310-321.

**Deblinger 2001**

{published data only}

Deblinger E, Stauffer LA, Steer RA. Comparative efficacies of supportive and cognitive behavioral group therapies for young children who have been sexually abused and their nonoffending mothers. *Child Maltreatment* 2001;6(4):332 - 343.

**Dominguez 2001**

{unpublished data only}

\* Dominguez RZ. Evaluation of cognitive-behavioral and supportive treatments for sexually abused children: Analyzing the process of change using individual growth curve analyses [Phd dissertation]. Houston TX: University of Houston, 2001.

**King 2000**

{published data only}

\* King NJ, Tonge BJ, Mullen P, Myerson N, Heyne D, Rollings S, Martin RM, Ollendick TH. Treating sexually abused children with posttraumatic stress symptoms: a randomized clinical trial. *Journal of the American Academy of Child and Adolescent Psychiatry* 2000;39(11):1347-1355.

**Excluded studies****Downing 1988**

{published data only}

Downing J, Jenkins SJ, Fisher GL. A comparison of psychodynamic and reinforcement treatment with sexually abused children. *Elementary School Guidance and Counseling* 1988;22:291 -298.

**Jaberghaderi 2004**

{published data only}

Jaberghaderi N, Greenwald R, Rubin A, Zand SO, Dolatabadi S. A comparison of CBT and EMDR for Sexually Abused Iranian Girls. *Clinical Psychology and Psychotherapy* 2004;11:358–368.

**Verleur 1986**

{published data only}

Verleur D, Hughes RE, Dobkin de Rios M. Enhancement of self-esteem among female adolescents incest victims: a controlled comparison. *Adolescence* 1986;21:843-854.

\* indicates the primary reference for the study

## Other references

### Additional references

#### **Achenbach 1991**

Achenbach TM. Manual for the Child Behavior Checklist/4-18 and 1991 Profile. Burlington VT: University of Vermont Department of Psychiatry, 1991.

#### **APA 1987**

American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, 3rd Edition-revised (DSM III-R). Washington DC: APA, 1987.

#### **Banyard 2004**

Banyard VL, Williams LM, Siegal JA.. Childhood Sexual Abuse: A Gender Perspective on Context and Consequences. *Child Maltreatment* 2004;9(3):223-238.

#### **Beck 1996**

Beck AT, Steer RA, Brown GK. Manual for the Beck Depression Inventory II. San Antonio, TX: Psychological Corporation, 1996.

#### **Briere 1996**

Briere J. Trauma symptom checklist for children. Odessa, FL: Psychological Assessment Resources, 1996.

#### **Briere 2003**

Briere J, Elliott, DM.. Prevalence and psychological sequelae of self-reported childhood physical and sexual abuse in a general population sample of men and women. *Child Abuse and Neglect* 2003;27:1205-1222.

#### **Celano 1992**

Celano M, Webb C, Hazzard A. In: Parental attributions of responsibility for child sexual abuse (Paper presented at the National Symposium on Child Victimization). Washington, DC: NSCV, 1992 (May).

#### **Cohen 1996**

Cohen JA, Mannarino AP. Factors that mediate treatment outcome in sexually abused preschool children. *Journal of the American Academy of Child and Adolescent Psychiatry* 1996;35(10):1402-1410.

#### **Cohen 2005b**

Cohen JA. Treating traumatized children: current status and future directions. *Journal of Trauma*

Dissociation 2005;6:109-121.

**Deblinger 1996**

Deblinger E, Lippman J, Steer R. Sexually abused children suffering post-traumatic stress symptoms: initial treatment outcome findings. *Child Maltreatment* 1996;1:310-21.

**Dube 2005**

Dube SR, Anda RF, Whitfield CL, Brown DW, Felitti VJ, Dong M, Giles WH.. Long-Term Consequences of Childhood Sexual Abuse by Gender of Victim. *American Journal of Preventive Medicine* 2005;28(5):430-438.

**Everson 1989**

Everson MD, Hunter WM, Runyon DK, Edelsohn GA, Coulter ML. Maternal support following disclosure of incest. *American Journal of Orthopsychiatry* 1989;59:197 - 207.

**Farmer 1998**

Farmer E, Pollock S. Sexually abused and abusing children in substitute care. Chichester: Wiley, 1998.

**Finkelhor 1994**

Finkelhor D. The international epidemiology of child sexual abuse: an update. *Child Abuse and Neglect* 1994;18:409-417.

**Finkelhor 1995**

Finkelhor D, Berliner L. Research on the treatment of sexually abused children: a review and recommendations. *J Am Acad Child Adolesc Psychiatry* 1995;34:19-28.

**Friedrich 1986**

Friedrich WN, Urquiza AJ , Beilke RL. Behaviour problems in sexually abused young children. *Journal of Pediatric Psychology* 1986;11:47-57.

**Friedrich 1992**

Friedrich WN, Grambsch P, Damon L et al. Child Sexual Behavior Inventory: normative and clinical comparisons. *Psychological Assessment* 1992;4:303 - 311.

**Green 1993**

Green AH. Child sexual abuse: immediate and long term effects and intervention. *Journal of the American Academy of Child and Adolescent Psychiatry* 1993;32:890-902.

**Harrington 1998**

Harrington R, Wood A, Verduyn C. Clinically depressed adolescents. In: Graham P, editor(s).

Cognitive-behaviour therapy for children and families. Cambridge: Cambridge University, 1998.

**Higgins 2005**

Higgins JPT, Green S, editors. Cochrane Handbook for Systematic Reviews of Interventions 4.2.5 [updated May 2005]. In: The Cochrane Library, Issue 3, 2005. Chichester, UK: John Wiley & Sons, Ltd, 2005.

**Holmes 1998**

Holmes WC, Slap GB.. Sexual abuse of boys. *Journal of the American Medical Association* 1998;280:1855-1862.

**Horowitz 1979**

Horowitz M, Wilner N, Alvarez W. Impact of Events Scale: a measure of subjective stress. *Psychometric Medicine* 1979;41:209 - 218.

**Jones 1999**

Jones DPH, Ramchandani P. *Child sexual abuse: Informing practice from research*. Abingdon: Radcliffe Medical Press, 1999.

**Kaufman 1997**

Kaufman J, Birmaher B, Brent D, Rao U, Flynn C, Moreci P, Williamson D, Ryan N. Schedule for affective disorders and schizophrenia for school-age children- Present and Lifetime Version (K-SADS-PL). *Journal of the American Academy of Child Adolescent Psychiatry* 1997;36:980 - 988.

**Kazdin 1989**

Kazdin AE. Cognitive-behavioural therapy and relationship therapy in the treatment of children referred for antisocial behavior. *Journal of Consulting and Clinical Psychology* 1989;57(4):522-535.

**Kendall 1994**

Kendall PC. Treating anxiety disorders in children: results of a randomized clinical trial. *Journal of Consulting and Clinical Psychology* 1994;62:100-110.

**Kendall-Tackett 1993**

Kendall-Tackett K A, Meyer-Williams L, Finkelhor D. Impact of sexual abuse on children: a review and synthesis of recent empirical studies. *Psychological Bulletin* 1993;113(1):164-180.

**Kleinknecht 1988**

Kleinknecht RA, Bernstein DA. Fear Thermometer. In: Hersen M, Bellach A, editor(s). *Dictionary of Behavioral Assessment Techniques*. New York: Pergamon, 1988:220 - 221.

**Kovacs 1981**

Kovacs M. Rating scales to assess depression in school-age children. *Acta Paedopsychiatrica* 1981;46(5-6):305-315.

**Mannarino 1994**

Mannarino AP, Cohen JA, Berman SR. Children's Attribution and Perception Scale: a new measure of sexual abuse-related factors. *Journal of Clinical Psychology* 1994;23:204 - 211.

**Molnar 2001**

Molnar BE, Buka SL, Kessler RC. Child sexual abuse and subsequent psychopathology: results from the National Comorbidity Survey. *American Journal of Public Health* 2001;91(5):753-760.

**Nelson 2002**

nelson EC, Heath AC, Madden PA, Cooper ML, Dinwiddie SH, Bucholz KK, Glowinski A, McLaughlin T, Dunne MP, Statham DJ, Martin NG. Association between self-reported childhood sexual abuse and adverse psychosocial outcomes: results from a twin study.. *Archives of General Psychiatry* 2002;59(2):139-145.

**Oates 1994**

Oates RK , O'Toole BI, Lunch D, Stern A., Cooney G. Stability and change in outcomes for sexually abused children. *Journal of the American Academy of Child and Adolescent Psychiatry* 1994;33:945-953.

**Ollendick 1983**

Ollendick TH. Reliability and validity of the revised Fear Survey Schedule for Children. *Behavior Research and Therapy* 1983;21:77 - 84.

**Orvaschel 1982**

Orvaschel H, Puig-Antich J, Chambers W, Tabrizi MA, Johnson R. Retrospective assessment of child psychopathology with the Kiddie-SADS-E. *Journal of the American Academy of Child and Adolescent Psychiatry* 1982;21:392-397.

**Orvaschel 1994**

Orvaschel H. Schedule for Affective Disorders and Schizophrenia for School-Aged Children - Epidemiologic Version 5 (K-SADS-E) [unpublished instrument]. Fort Lauderdale, FL: Nova Southeastern University, 1994.

**Prentky 1996**

Prentky RA. A rationale for the treatment of sex offenders: Pro Bono Publico. In: J McGuire, editor(s). *What works: reducing reoffending. Guidelines from research and practice.* Chichester: Wiley, 1996.

**Puttnam 2003**

Puttnam FW. Ten-year research update review: child sexual abuse. *Journal of the American Academy of Child and Adolescent Psychiatry* 2003;42:269-278.

**Reynolds 1978**

Reynolds CR, Richmond CO. What I think and feel: a revised measure of children's manifest anxiety. *Journal of Abnormal Child Psychology* 1978;6:271 - 280.

**Robinson 1995**

Robinson CC, Mandleco B, Olsen SF. Authoritative, authoritarian, and permissive parenting practices: Development of a new measure. *Psychological Reports* 1995;77(3):819-830.

**Shaffer 1983**

Shaffer D, Gould MS, Ambrosini P, Fisher P, Bird H, Aluwahila S. Children's Global Assessment Scale (CGAS). *Archives of General Psychiatry* 1983;40:1228 - 1231.

**Silverman 1996**

Silverman WK, Albano AM. Anxiety Disorders Interview Schedule for DSM-IV, Child and Parent Versions. San Antonio, TX: Psychological Corporation, 1996.

**Skuse 1998**

Skuse D, Bentovim A, Hodges J, Stevenson J, Andreou C, Lanyado M, New M, Williams B, McMillan D. Risk factors for the development of sexually abusive behaviour in sexually victimised adolescent males: cross sectional study. *BMJ* 1998;317:175-9.

**Spielberger 1973**

Spielberger CD. Manual for the State-Trait Anxiety Inventory for Children. Palo Alto, CA: Consulting Psychologists Press, 1973.

**Stevenson 1999**

Stevenson J. The treatment of long-term sequelae of child abuse. *Journal of Child Psychology and Psychiatry* 1999;40:89-111.

**Strayhorn 1988**

Strayhorn JM, Weidman CS. A parent practices scale and its relation to parent and child mental health. *Journal of the American Academy of Child & Adolescent Psychiatry* 1988;27:613 - 618.

**Swanston 2003**

Swanston HY, Plunkett AM, O'Toole BI, Shrimpton S, Parkinson PN, Oates RK. Nine years after child sexual abuse. *Child Abuse and Neglect* 2003;27:967-984.

**Tebutt 1997**

Tebutt J, Swanston H. Five years after child sexual abuse: persisting dysfunction and problems of prediction. *Journal of the American Academy of Child and Adolescent Psychiatry* 1997;36:330-339.

**Trickett 1997**

Trickett PK. Sexual and physical abuse and the development of social competence. In: Luthar SS, Burack JA, Cicchetti D and Weisz JR, editor(s). *Developmental psychopathology: perspectives on adjustment, risk and danger*. New York: Cambridge University Press, 1997.

**Wolfe 1986**

Wolfe VV, Wolfe DA. Unpublished questionnaire. London, Ontario: University of Western Ontario, 1986.

**Wolfe 1991**

Wolfe VV, Gentile C, Michienzi T, Sas L, Wolfe DA. Children's Impact of Traumatic Events Scale: a measure of post-sexual abuse PTSD symptoms. *Behavioural Assessment* 1991;13:159 -183.

## Table of comparisons

### 01 CBT vs no CBT

- 01 Child depression (CDI)
  - 01 Short term (immediately after treatment)
  - 02 Long term (at least one year)
- 02 Child post-traumatic stress disorder (various scales)
  - 01 Short term (immediately after treatment)
  - 02 Long term (at least one year)
- 03 Child anxiety
  - 01 Short term (immediately after treatment)
  - 02 Long term (at least one year)
- 04 Child sexualised behaviour (CSBI)
  - 01 Short term (immediately after treatment)
  - 02 Long term (at least one year)
- 05 Child externalising behaviour (CBCL Externalising)
  - 01 Short term (immediately after treatment)
  - 02 Long term (at least one year)
- 06 Child offending
  - 01 Short term (immediately after treatment)
  - 02 Long term (at least one year)
- 07 Parental understanding of child sexual abuse
  - 01 Short term (immediately after treatment)
  - 02 Long term (at least one year)
- 08 Parent's belief of child (PRIDS and PSQ)
  - 01 Short term (immediately after treatment)
- 09 Parental attributions (PAS)
  - 01 Self blame
  - 02 Child blame
  - 03 Perpetrator blame
  - 04 Negative impact
- 10 Parenting skills (PPQ)
  - 01 Short term (immediately after treatment)
  - 02 Long term (at least one year)
- 11 Parents' emotional reaction (PERQ)
  - 01 Short term (Immediately after treatment)

## Additional tables

### 01 Participants

Study ID	Location	Age	Gender	Ethnicity	Inclusion Criteria	Exclusion Criteria	Abuse history
Berliner 1996	USA	4-13	Male - 11% Female - 89%	74% Caucasian; 12% African American; 6% Hispanic; 8% 'Other'	None stated	None stated	43% experienced penetration offences. About 15% had been physically injured. 25% threatened with physical injury. 75% of children had experienced multiple incidents of abuse. Most offenders were male adults (98%), were parents in over one third of cases, and strangers in just over 10%. The remainder were adults known to the children.
Burke 1988	USA	8-13	Female - 100%	No information provided	(i) reports of behavioral difficulties indicated in Child Protection case records (ii) girls had to have acknowledged that abuse had occurred, with sufficient evidence to agencies that the abuse was considered 'confirmed'. (iii) a pre-treatment score on the CDI of at least one standard deviation above the mean score obtained for a normative sample of girls aged 8-13; (iv) abuse must have occurred within the last two years	(i) Not within one year of their age appropriate grade level in school OR (ii) They participated in special education classes.	All but 4 girls had experienced intrafamilial abuse. Almost 50% had been subject to verbal threats from their perpetrators 3 had been subject to physical force
Celano 1996	USA	8-13	Female - 100%	75% African American 22% Caucasian 3% (n=1) Hispanic	(i) Girls who had experienced contact sexual abuse within the past 3 year period and could disclose the	(i) Mental retardation (ii) Psychotic or drug addicted children	Approximately 50% of the group reported vaginal or anal intercourse. 25% reported digital penetration of

					abuse to the clinician	(iii) psychotic or drug-addicted parents	the vagina, oral sex or attempted intercourse 25% reported fondling. All had been abused by men, 56% of whom were family members. 25% were in a paternal caregiver's role 31% were other family members Remainder were acquaintances (31%) or strangers (13%)
Cohen 1996/7	USA	3-6	Male - 42% Female - 58% (Treatment completers)	54% Caucasian 42% African American 4% 'other'	(i) Experienced some form of sexual abuse defined as 'sexual exploitation involving physical contact between a child and another person (where) exploitation implies an inequality of power between the child and the abuser on the basis of age, physical size and/or the nature of the emotional relationship. If the perpetrator was a child, he or she had to be at least 5 years older than the abused child. (ii) Most recent episode occurred no more than 6 months before referral;  (iii) Abuse reported to child protection services; (iv) Substantiated; (v) Minimal level of symptomatology or any sexually inappropriate behaviour; and (vi) \parental consent	(i) Mental retardation or PDD; (ii) Psychotic symptoms; (iii) Serious medical illness (iv) Psychotic disorder or active substance misuse in participant parent; (v) lack of long-term caretaker	25% abused once; 26% abused between 2 and 5 times; 15% abused between 6 and 10 times; 29% abused more than 10 times. 5% unknown. 46% experienced genital fondling only; 26% experienced vaginal and/or anal intercourse; 22% experienced oral-genital contact; 3% experienced fondling of breasts and 3% experienced 'other' or 'unknown'. 15% abused by biological father; 2% by mother. 10% by mother's paramour (sic). 46% had multiple abusers or 'other'.
Cohen 1998	USA	7-15	Male - 31% Female - 69%	59% Caucasian 37% African American	(Deduced) (i) Children and adolescents who	(i) Mental retardation (ii) Pervasive	54% experienced anal and/or vaginal intercourse

			(Treatment Completers)	2% Hispanic 2% 'biracial'	had experienced independently validated contact sexual abuse perpetrated by someone at least 5 years older than the participant	developmental disorder (PDD) (iii) Active psychosis or substance abuse (iv) Serious medical illness (iv) Lack of long-term (at least 12 months) caretaker (v) Active psychosis or substance misuse in the primary caretaker	2% experienced oral intercourse 44% experienced genital fondling only. 36% reported having experienced a single episode of abuse; 21% were abused on 2-5 occasions; 8% were abused 6-10 times and 33% reported abuse more than 1- times. 2% did not report the number of abuse episodes. In 15% of cases the abuse was accompanied by the use of threatened or actual force. 15% were beaten 28% were threatened with beating, 26% were physically restrained, 13% were threatened with physical punishment other than beating. 18% reported no physical force being used. 10% were abused by the biological father, 13% by the stepfather, 10% by mother's male paramour (sic), 2% by uncle, 5% by grandfather, 15% by an older minor, 13% by an older brother and 32% by a perpetrator other than the above
Deblinger 1999	USA	7-13	Male - 17% Female - 83%	72% Caucasian 20% African American 6% Hispanic 2% other	(i) Substantiated contact sexual abuse (ii) consent to participation completed by the child and child's legal guardian (iii) presence of a total of 3 post-traumatic stress symptoms, including at least one symptom of avoidance or re-experiencing	(i) Severe developmental delay (ii) Psychosis (iii) Ongoing, unsupervised contact with the alleged perpetrator (iv) Female caretaker not willing to participate (v) Dangerousness to	66% of children had had last sexually abusive incident in the 6 months prior to initial evaluation 16% had suffered sexual abuse 6 months to 2 years before, and 18% had experienced the last abusive incident over 2 years previously. Duration of abuse ranged from 1 day to more than 5 years of repeated

					phenomenon	<p>themselves (suicidal) or others (e.g. dangerous aggressive behaviour)</p> <p>Children in this last group were referred for crisis intervention or hospitalisation at any time during the investigation. They were excluded only if they were referred for such treatment during the initial investigation.</p>	<p>abuse.</p> <p>18% experienced 1 sexually abusive incident</p> <p>47% experienced between 2 and 10</p> <p>22% experienced between 11 and 50</p> <p>13% experienced more than 50 incidents.</p> <p>Abuse ranged from sexual touching (45%) to simulated intercourse (7%) to oral-genital contact (17%) to penile penetration of the vagina or anus (33%)</p> <p>32% of perpetrators were fathers or stepfathers</p> <p>19% were other adult relatives</p> <p>22% were adult non-relatives</p> <p>7% were multiple offenders</p>
Dominguez 2001	USA	6-17	Male - 24% Female - 76%	48% Caucasian 40% Hispanic 8% African American 4% 'other'	(Deduced) Children who had experienced genital fondling, attempted or actual penetration by an individual at least three years older than the participant, and who was not residing in the home at the time of the pre-treatment assessment.	<ul style="list-style-type: none"> <li>(i) Mental retardation</li> <li>(ii) Gross organic brain damage</li> <li>(iii) Psychotic or autistic behavior</li> <li>(iv) Learning disabilities</li> <li>(v) Perpetrators of violence</li> <li>(vi) Substance abusers</li> <li>(vii) Gang members</li> <li>(viii) Conduct disordered children</li> </ul>	<p>32% had been fondled;</p> <p>12% had experienced attempted penetration</p> <p>56% experienced penetration</p> <p>52% were abused by an older child</p> <p>16% were abused by an adult stranger</p> <p>8% were abused by an adult acquaintance and 8% by a non-caregiving adult well-known to the child</p> <p>16% were abused by someone previously in a caregiving role</p> <p>58% did not experience life threat or injury</p> <p>42% experienced life threat or injury</p> <p>4% experienced both life threat and</p>

							injury during abuse 25% experienced a single incident of abuse, 75% experienced multiple incidents of abuse.
King 2000	Australia	5-17	Male - 31% Female - 69%	Not reported	(i) English speaking child and parent (ii) History of contact sexual abuse where perpetrator was at least 5 years older than abused child (iii) Independently validated abuse (iv) Child's symptoms met diagnostic criteria for PTSD or provided evidence of high risk of developing the disorder. Children had to exhibit at least 3 PTSD stress symptoms including at least one of avoidance, or re-experiencing phenomena.	(i) Ongoing, unsupervised contact with alleged perpetrator (ii) Severe intellectual disability, psychosis or suicidal behavior (iii) Taking anti-depressants or anti-anxiety medication (iv) Child or parents not willing to participate	Nearly all children had experienced multiple episodes of sexual abuse, involving penetration offences and other forms In a majority of cases the offenders were adult males known to the child: biological father (n=4), stepfather (n=3), family friend (n=5), neighbour (n=5), professional (n=3), acquaintance (n=8), and older youth (n=4) and 'other' (n=4).
Cohen 2004	USA	8-14	Male - 21% Female - 79%	60% White 28% African American 7% Biracial 1% Other	(i) Children had to meet five criteria for sexual abuse-related DSM-IV defined PTSD, including at least one symptom in each of the three PTSD clusters (re-experiencing, avoidance or numbing, and hyperarousal) (ii) Contact sexual abuse, validated either by Child Protection Services, law enforcement or an independent forensic evaluation. (iii) A caretaker who was willing and able to participate in the parental treatment component of the study	(i) Active psychotic disorder or substance use disorder that resulted in significant impairment in adaptive functioning (ii) The parent/caretaker had such a disorder (iii) Not fluent in English (iv) A developmental disorder such as autism (v) Were already receiving psychotherapy for CSA NB Children who were taking psychotropic medication had to have	Authors report 'most intrusive type of sexual abuse' to be: 2.9 % Sexual touching over clothes 4.4% Nongenital touching under clothes 22% digital penetration 10.3% Simulated intercourse 20.1% Oral-genital abuse 37.4% Penile penetration 3.9% Other Step-parents were the abusers in 23% of cases, with the next largest group of offenders being classed as 'other adult nonrelatives' 20.7%, other adults relatives (16.3%) and Older,

					(iv) Informed parental consent obtained	been on a stable medication regimen for at least 2 months prior to admission.	non-relative peers (12.3)
Deblinger 2001	USA	2-8	Male - 39% Female - 61% (completers only)	64% White 21% Black 2% Hispanic 14% Other ethnic origins	(i) Children with a credible disclosure of sexual abuse to a professional, drawn EITHER from referres to the Regional Child Abuse Diagnostic and Treatment Center for forensic medical examination as part of a chid sexual abuse investigation OR from a range of professionals contacted by the Center to invite referrals.	(i) Parents and/or children with psychotic disorders. (ii) Parents and/or children with severe developmental delays. (iii) Parents and/or children with behaviours dangerous to themselves or others.	36% abused by adults (18 years and older); 64% abused by adolescents or older children (17 years or younger); Of adult perpetrators 9% were fathers or stepfathers, 13.6% were other adult relatives and 13.6% were non related. Of older peer perpetrators 4.5% were siblings, 25% were related older peers and 34% were not related. Penile penetration had occurred with 16% of the children. Mother's estimate of how old the children had been when sexual abuse first occurred indicated a mean age of 4.50 (SD=1.47) years. Mothers believed the abuse had occurred once for 15 (34%) children and more than once for the remaining 29 (66%).

## Additional tables

### 02 Additional methods for future updates

Issue	Method
Assessment of reporting bias	Any disagreements about eligibility will be resolved through discussion and, if necessary, with the involvement of the third author. Where appropriate, further information will be sought from the study authors.
Subgroup analyses and investigation of heterogeneity	If substantial heterogeneity is identified within a meta-analysis, two possible sources will be investigated separately: i) studies that include non-offending parents in the treatment programme and those that do not, and (ii) studies that focus on abuse-specific behaviour and those which do not.
Sensitivity analyses	<p>Primary analyses will be based on available data from all included studies relevant to the comparison and outcome of interest. In order to assess the robustness of conclusions to quality of data and approaches to analysis, sensitivity analyses will be performed, as follows:</p> <p>(a) Intention to treat For dichotomous outcomes, such as 'offended' or 'attempted suicide', we will assume that those who were lost to follow up (i) had proportionately the same outcomes as those who completed in the control group, (ii) experienced the successful outcome (iii) all experienced the unsuccessful outcome</p> <p>(b) Differential drop out Studies with severe imbalance in terms of numbers of attrition will be excluded from the analyses to assess their influence on overall results.</p>

## Additional tables

### 03 Methodological quality of included studies

Study ID	Randomisation	Participant blinding	Assessment blinding	Attrition	ITT analyses
Berliner 1996	Groups were randomised using a random number table generated at the outset of the project.	Not reported	No. Measures completed by children and parents.	51 of the original 154 participants dropped out before post-treatment. A further 16 dropped out by the first follow-up period and 7 more by the final period.	Not reported
Burke 1988	Method not reported. Participants randomised within the constraints of age, type of abuse experienced, and reported amount of force used during the abuse.	Not reported	No. Measures completed by children and parents.	None reported	Not reported
Celano 1996	Method not reported	Not reported	A psychiatrist or psychologist blind to the treatment condition rated the child's overall psychosocial functioning based on child and caretaker interviews. Standardised measures were administered by a clinician not involved in the child's treatment, but not reported as blind to the treatment condition.	2 participants dropped out before treatment began. It is not clear whether or not they had already been randomised. Of the 15 who dropped out after treatment began, 10 dropped out of the experimental group and 5 from the control group.	Not reported
Cohen 1996/7	Efron's biased coin toss	Not reported	No	13 of the 86 participants dropped out	Not reported

			All but one of the child outcome measures was completed by the child's parent.	during treatment. A further 6 were removed because of persistent sexually inappropriate behaviour. No information is provided about the distribution of these drop-outs and exclusions. At follow-up, data on only 43 of the original participants are presented. No information is provided about the reasons for these subsequent losses of data (other than the 'kinds' of reason) or their distribution across groups.	
Cohen 1998	Efron's biased coin toss/random numbers series generated by computer	Not reported	2004 paper reports that the evaluator conducting initial and follow up assessments was blind to treatment condition or assignment.	4 participants dropped out between assessment and intervention. 10 participants dropped out after completing 3 or fewer sessions. 10 dropped out after completing between 4 and 8 sessions. 9 were removed for persistent contact sexualised behaviours. 11 children dropped out of the experimental group, 22 from the control group. Larger numbers of children were removed from the control group than from the experimental group for reasons fo ongoing sexual behaviors towards other children ( 7 compared to 2).	Yes
Deblinger 1999	Method not reported. Participants randomised after initial assessment.	Not reported	Not reported. Therapist were involved in the collection of baseline data.	10 participants dropped out of the study during treatment. The drop-out appears to be 3 participants from the waitlist control and two of the experimental groups, and 1 from the 'child only' experimental group. Missing data increased over time, but no	Not reported

				information given on the total numbers or their distribution across groups.	
Dominguez 2001	Method not reported Participants randomised before pre-treatment assessments.	Not reported	Not reported	7 of the 32 children who started treatment dropped out, 4 from the experimental group and 3 from the control group.	Not reported
King 2000	Method not reported. Participants randomised after pre-treatment assessment.	Not reported	Assessors not blinded.  Assessments conducted by therapists.	Between recruitment and treatment 10 families lost out of 32 eligible families referred. During treatment Experimental groups each lost 3 participants. Community Control group lost 2 participants.	Yes
Cohen 2004	Method not reported	Not reported	All therapists trained in both modalities, therefore assessors were blind to which therapy had been used in any particular case.	26 of the 229 children originally randomised dropped out of the study. 5 (2%) never returned for treatment 8 (3%) left after attending one session 13 (6%) left after attending only two sessions.	Yes
Deblinger 2001	Therapeutic method was randomly determined by computer programme prior to the initiation of a group.	Not reported	All therapists were trained in both approaches used	67 mothers volunteered for the project 4 did not return for assignment 5 left after attending one session 4 left after attending 2 sessions These 13 were treated as drop-outs. Of the 54 who completed at least three group sessions (and were therefore included in the analyses) only 44 completed both post-test and 3 month follow-up evaluations. 1 mother failed to complete the post-test evaluation and a further 9 failed to complete either. The 2001 paper reports data on these 44.	No

## Additional tables

### 04 Outcome measures used by studies in the review

Outcome	Outcome measures	Studies	Measures used in SR
Post-traumatic stress	CITES-R (child report)	Celano 1996	Yes
	CBCL-PTSD section (parent report)	Celano 1996 King 2000	No
	K-SADS-E PTSD Subscale (K-SADS-E)	Deblinger 1999 (initial evaluation only) Deblinger 2001	N/A Yes
	K-SADS-PL (re-experiencing, avoidance and hypervigilance)	Cohen 2004	Yes (re-experiencing)
	TSCC (child report) PTSD, Anxiety, Depression, sexual problems, dissociation and anger subscales)	Cohen 1998	Yes (PTSD)
	ADIS-DSM IV PTSD section (child version) Re-experiencing, avoidance, hyperarousal subscales	King 2000	Yes (re-experiencing)
Fear	FSCC-Revised (Total score, and five subscores)	Burke 1988 Berliner 1996	No
	FT-SAC	King 2000	No
	SAFE (Sex associated fear; Interpersonal discomfort subscales)	Berliner 1996	No
Anxiety	RCMAS (Total score plus three subscores)	Burke 1988 Berliner 1996 King 2000	No (no data available) Yes (total score) Yes (total score)
	STAIC (State and Trait)	Cohen 1998 Deblinger 1999 Cohen 2004	Yes (State) Yes (State) Yes (State)
Behaviour	CBCL (parent report)	Burke 1988 (internalising)	No data available for

		Berliner 1996 Celano 1996 (internalising and externalising) Cohen 1996/7 Cohen 1998 Deblinger 1999 King 2000 Deblinger 2001 Cohen 2004	Burke. Data on externalising behaviour available and incorporated from all other studies in the review.
Sexual Behaviour	CSBI	Berliner 1996 Cohen 1996/7 Cohen 1998 Deblinger 2001 Cohen 2004	Yes
Child coping	GAF	King 2000	No
	CGAS	Celano 1996	No
	CQ-SAQ	King 2000	No
Impact of Events	IES-R	Dominguez 2001	No
Children's Attributions	CAPS	Cohen 2004	No
Child Depression	CDI	Burke 1988 Berliner 1996 Cohen 1998 Deblinger 1999 King 2000 Dominguez 2001 Cohen 2004	Yes
Parental Depression	BDI	Cohen 2004	No
Parental attitudes	PAS	Celano 1996	
Parental belief and support	PRIDS (Emotional Support for Child, Belief of child)	Celano 1996	No

---

	PSQ revised	Cohen 2004	Yes
Parents Emotional Reactions	PERQ	Deblinger 2001 Cohen 2004	Yes
Parenting Practices	PPQ	Deblinger 1999 Deblinger 2001 Cohen 2004	Yes

## **Notes**

### **Unpublished CRG notes**

Exported from Review Manager 4.3 Beta

### **Published notes**

This review is co-registered within the Cochrane Collaboration.

### **Amended sections**

Cover sheet

Synopsis

Abstract

Background

Criteria for considering studies for this review

Search strategy for identification of studies

Methods of the review

Description of studies

Methodological quality of included studies

Results

Discussion

Reviewers' conclusions

Acknowledgements

References to studies

Other references

Characteristics of included studies

Comparisons, data or analyses

Additional tables and figures

---

## Contact details for co-reviewers

Dr Julian PT Higgins  
Senior Statistician  
MRC Biostatistics Unit  
Institute of Public Health  
Robinson Way  
Cambridge  
UK  
CB2 2SR  
Telephone 1: +44 1223 330396  
Telephone 2: +44 1223 330366  
Facsimile: +44 1223 330388  
E-mail: [julian.higgins@mrc-bsu.cam.ac.uk](mailto:julian.higgins@mrc-bsu.cam.ac.uk)  
URL: [www.mrc-bsu.cam.ac.uk](http://www.mrc-bsu.cam.ac.uk)  
Secondary address:  
Wort's Causeway  
Cambridge  
UK  
CB1 8RN  
Telephone: 01223 741492

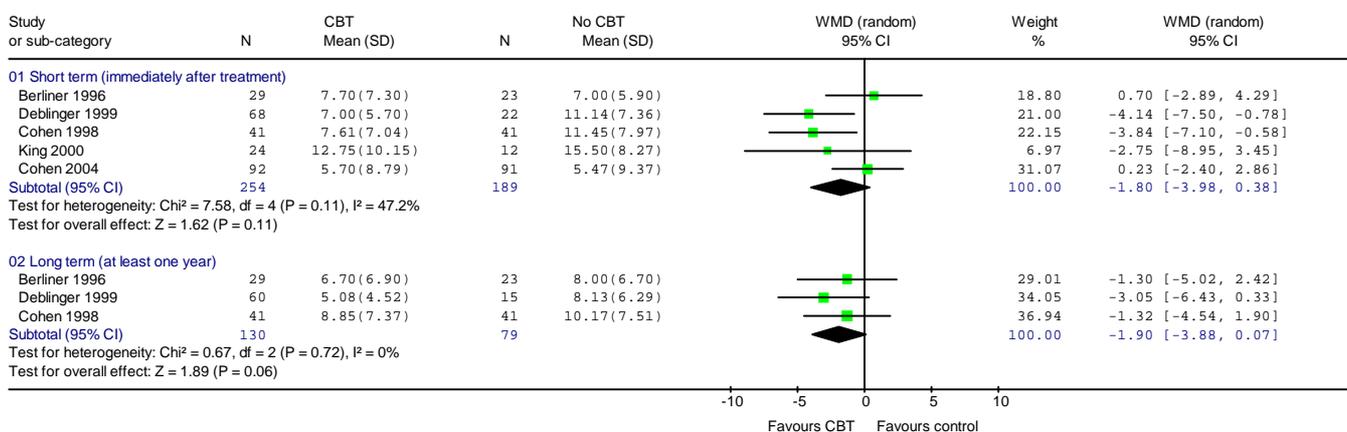
Dr Paul Ramchandani, BM MRCPsych MSc DPhil  
Research Fellow / Honorary Consultant Child and Adolescent Psychiatrist  
University of Oxford  
Department of Psychiatry  
Warneford Hospital  
Headington  
Oxford  
Oxfordshire UK  
OX3 7JX  
Telephone 1: +44 1865 226 491  
E-mail: [paul.ramchandani@psych.ox.ac.uk](mailto:paul.ramchandani@psych.ox.ac.uk)  
Secondary address (home):  
[paulgulab@aol.com](mailto:paulgulab@aol.com)  
Telephone: 44 1908 584 679

## Review: Cognitive-behavioural interventions for children who have been sexually abused (For publication)

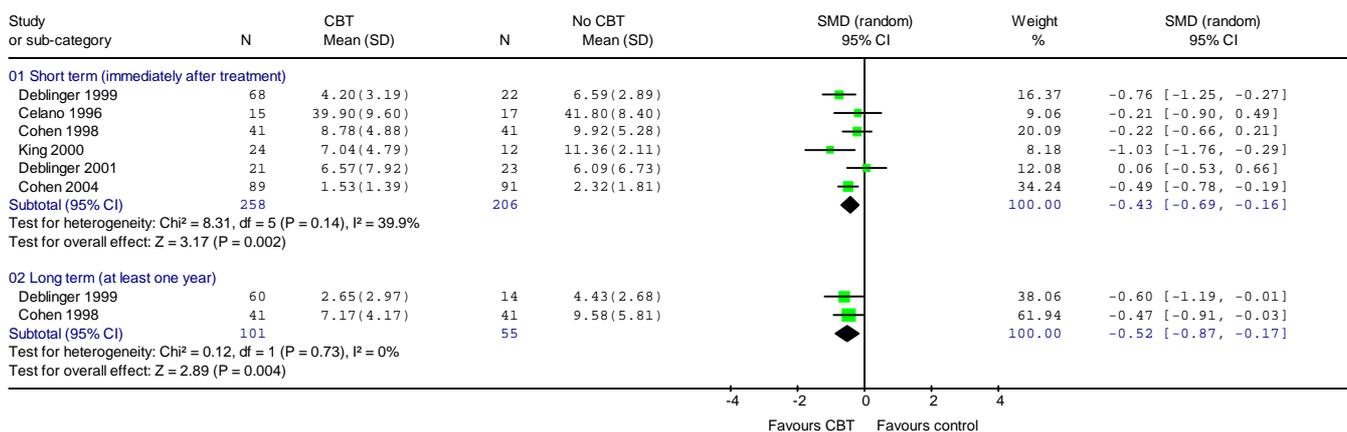
Total number of included studies: 10

Comparison or outcome	Studies	Participants	Statistical method	Effect size
01 CBT vs no CBT				
01 Child depression (CDI)			WMD (random), 95% CI	Subtotals only
02 Child post-traumatic stress disorder (various scales)			SMD (random), 95% CI	Subtotals only
03 Child anxiety			SMD (fixed), 95% CI	Subtotals only
04 Child sexualised behaviour (CSBI)			WMD (random), 95% CI	Subtotals only
05 Child externalising behaviour (CBCL Externalising)			SMD (random), 95% CI	Subtotals only
06 Child offending	0	0	OR (fixed), 95% CI	Not estimable
07 Parental understanding of child sexual abuse			WMD (random), 95% CI	Subtotals only
08 Parent's belief of child (PRIDS and PSQ)			SMD (random), 95% CI	Subtotals only
09 Parental attributions (PAS)			WMD (random), 95% CI	Subtotals only
10 Parenting skills (PPQ)			WMD (random), 95% CI	Subtotals only
11 Parents' emotional reaction (PERQ)	2	223	WMD (fixed), 95% CI	-6.95 [-10.11, -3.80]

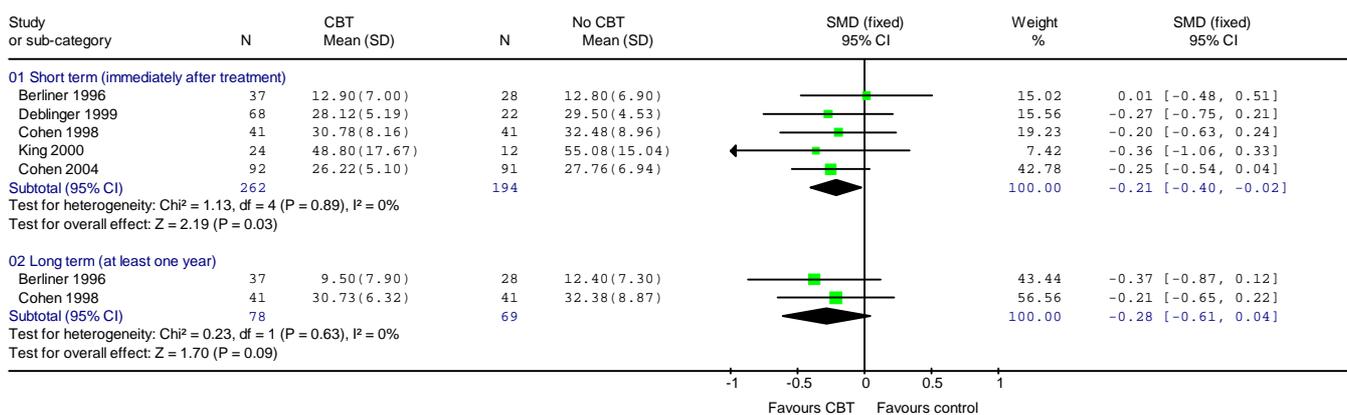
Review: Cognitive-behavioural interventions for children who have been sexually abused (For publication)  
 Comparison: 01 CBT vs no CBT  
 Outcome: 01 Child depression (CD)



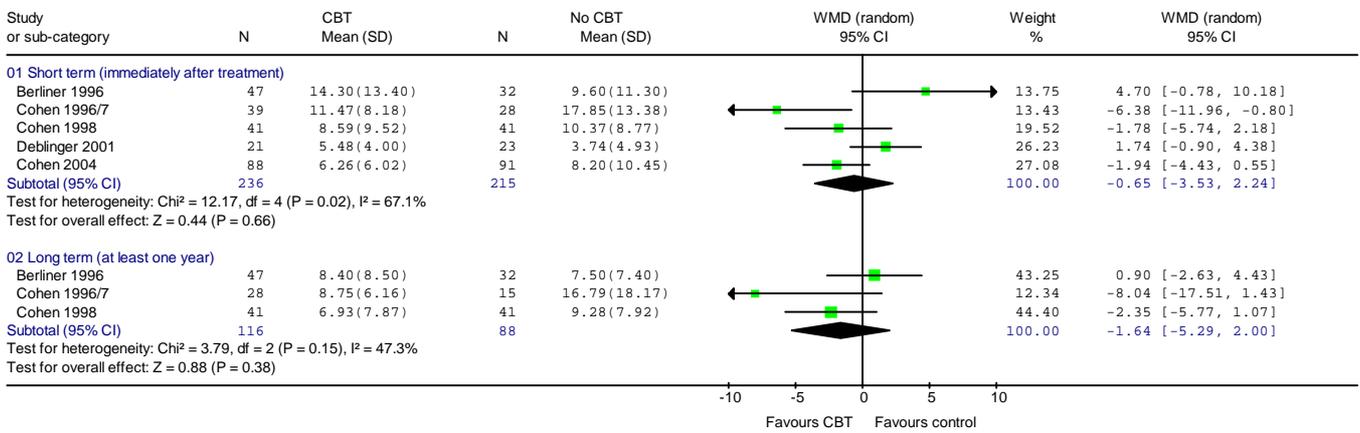
Review: Cognitive-behavioural interventions for children who have been sexually abused (For publication)  
 Comparison: 01 CBT vs no CBT  
 Outcome: 02 Child post-traumatic stress disorder (various scales)



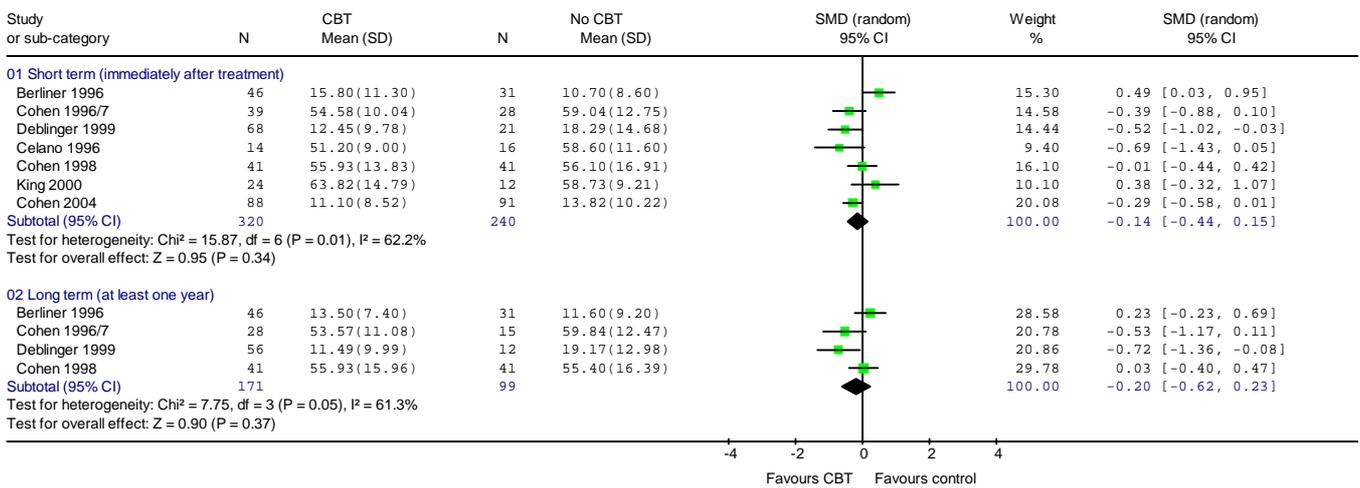
Review: Cognitive-behavioural interventions for children who have been sexually abused (For publication)  
 Comparison: 01 CBT vs no CBT  
 Outcome: 03 Child anxiety



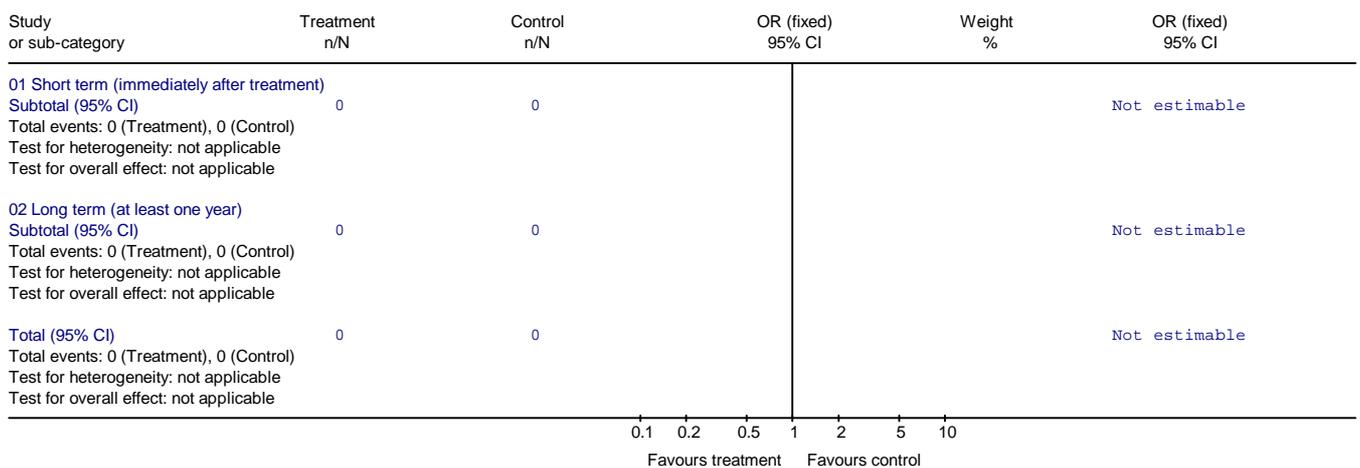
Review: Cognitive-behavioural interventions for children who have been sexually abused (For publication)  
 Comparison: 01 CBT vs no CBT  
 Outcome: 04 Child sexualised behaviour (CSBI)



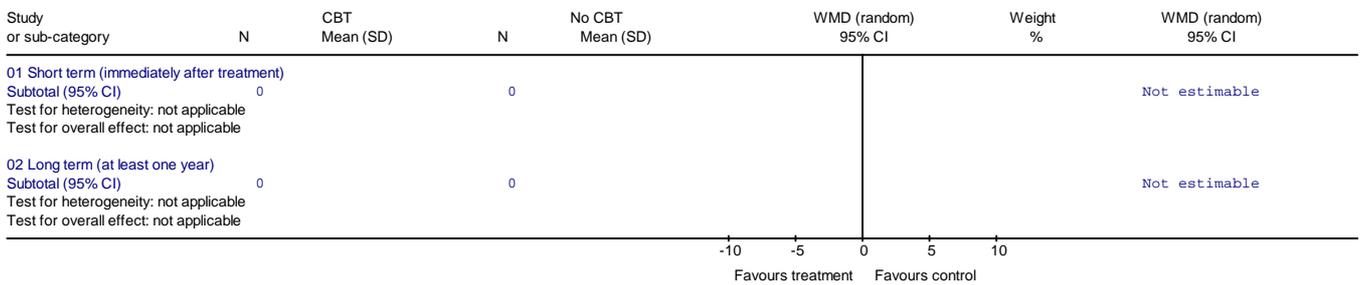
Review: Cognitive-behavioural interventions for children who have been sexually abused (For publication)  
 Comparison: 01 CBT vs no CBT  
 Outcome: 05 Child externalising behaviour (CBCL Externalising)



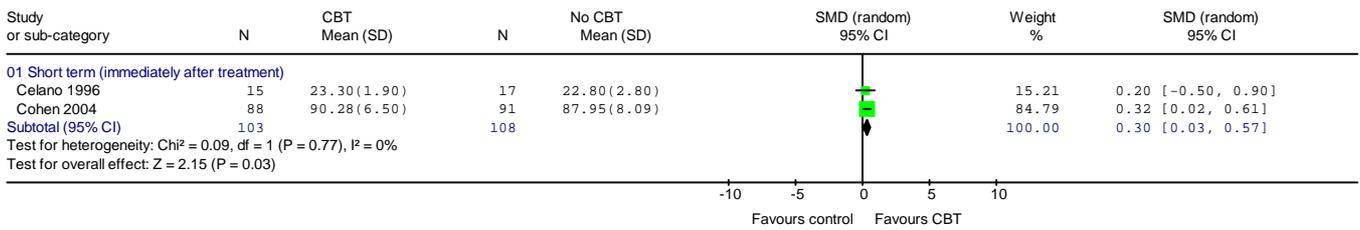
Review: Cognitive-behavioural interventions for children who have been sexually abused (For publication)  
 Comparison: 01 CBT vs no CBT  
 Outcome: 06 Child offending



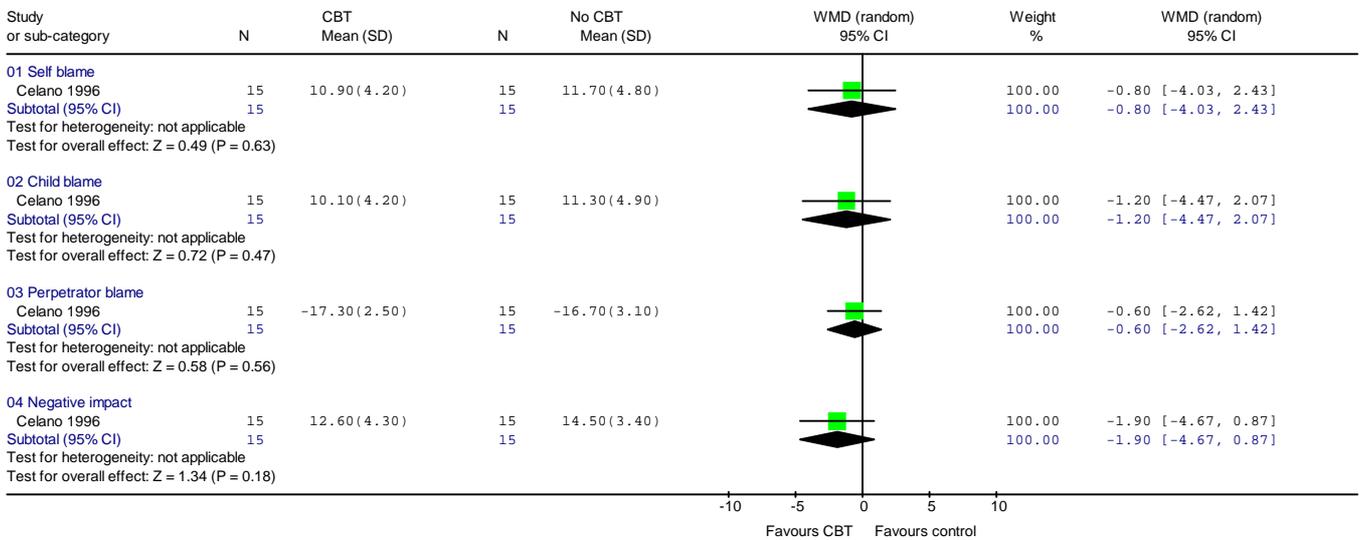
Review: Cognitive-behavioural interventions for children who have been sexually abused (For publication)  
 Comparison: 01 CBT vs no CBT  
 Outcome: 07 Parental understanding of child sexual abuse



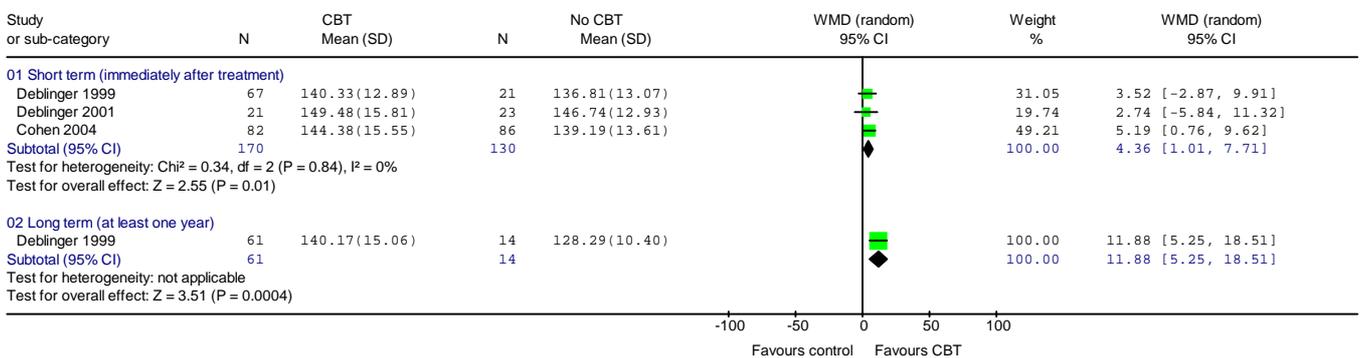
Review: Cognitive-behavioural interventions for children who have been sexually abused (For publication)  
 Comparison: 01 CBT vs no CBT  
 Outcome: 08 Parent's belief of child (PRIDS and PSQ)



Review: Cognitive-behavioural interventions for children who have been sexually abused (For publication)  
 Comparison: 01 CBT vs no CBT  
 Outcome: 09 Parental attributions (PAS)



Review: Cognitive-behavioural interventions for children who have been sexually abused (For publication)  
 Comparison: 01 CBT vs no CBT  
 Outcome: 10 Parenting skills (PPQ)



Review: Cognitive-behavioural interventions for children who have been sexually abused (For publication)  
 Comparison: 01 CBT vs no CBT  
 Outcome: 11 Parents' emotional reaction (PERQ)

