Individual and group-based parenting programmes for the treatment of physical child abuse and neglect (Review)

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[Intervention Review]

Individual and group-based parenting programmes for the treatment of physical child abuse and neglect

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ABSTRACT

Background

Child physical abuse and neglect are important public health problems for which there are currently few effective treatments. Many of the risk factors for child abuse and neglect are not amenable to change in the short term. Intervening to change parenting practices may, however, be important in its treatment. Parenting programmes are focused, short-term interventions aimed at improving parenting practices, and may therefore be useful in the treatment of physically abusive or neglectful parenting.

Objectives

To assess the efficacy of group-based or one-to-one parenting programmes in addressing child physical abuse or neglect.

Search methods

A range of biomedical and social science databases were searched including MEDLINE, EMBASE, CINAHL, PsychINFO, Sociofile, Social Science Citation Index, ASSIA, the Cochrane Library, Campbell Library (including SPECTR and CENTRAL), National Research Register (NRR) and ERIC, from inception to May 2005.

Selection criteria

Only randomised controlled trials or randomised studies evaluating the effectiveness of standardised group-based or one-to-one parenting programmes aimed at the treatment of physical child abuse or neglect were included.

Data collection and analysis

The results for each outcome in each study have been presented, with 95% confidence intervals.

Main results

A total of seven studies of variable quality were included in this review. Only three studies assessed the effectiveness of parenting programmes on objective measures of abuse (e.g. the incidence of child abuse, number of injuries, or reported physical abuse), and only one of these found significant differences between the intervention and control groups.

Data were also extracted on over fifty outcomes that are used as predictive measures of abusive parenting. These measured a range of aspects of parenting (e.g. parental child management, discipline practices, child abuse potential and mental health), child health (e.g. emotional and behavioural adjustment) and family functioning, thereby precluding the possibility of undertaking a meta-analysis for most outcomes for which data were extracted. While none of the programmes were effective across all of the outcomes measured, many appeared to have improved some outcomes for some of the participating parents, although many failed to achieve statistical significance.

Authors' conclusions

There is insufficient evidence to support the use of parenting programmes to treat physical abuse or neglect. There is, however, limited evidence to show that some parenting programmes may be effective in improving some outcomes that are associated with physically abusive parenting. Further research is urgently needed.

PLAIN LANGUAGE SUMMARY

Parenting programmes for the treatment of physical child abuse and neglect

Physical abuse and neglect of children are significant problems and changing parenting practices may be an important means of addressing them. This review examines the extent to which parenting programmes (relatively brief and structured interventions that are aimed at changing parenting practices) are effective in treating physically abusive or neglectful parenting. A total of seven studies of mixed quality were included in the review. The findings show that there is insufficient evidence to support the use of parenting programmes to reduce physical abuse or neglect (i.e. using objective assessments of abuse such as reports of child abuse; children on the children protection register etc). There is, however, limited evidence to show that some parenting programmes may be effective in improving some outcomes that are *associated* with physically abusive parenting. There is an urgent need for further rigorous evaluation of the effectiveness of parenting programmes that are specifically designed to treat physical abuse and neglect, either independently or as part of broader packages of care.

BACKGROUND

Description of the condition

Child physical abuse and neglect are important public health problems. A recent UK population-based survey showed that 6% of individuals aged 18-33 years had been subject to serious physical neglect at home and 7% had suffered serious physical abuse at the hands of a parent or carer (Brooker 2001). Child maltreatment is one of the most serious events undermining healthy psychological development, and no other social risk factor has a stronger association with developmental psychopathology (Brooker 2001). The negative sequelae have been documented across a range of domains including cognition, language, learning, socio-emotional development, mental and physical health (Cicchetti 1989).

Many of the risk factors for child abuse and neglect are either not amenable to change in the short term (i.e. maternal youth, parental history of abuse) or insufficiently specific to represent an efficient target for intervention (e.g. single parents, frequent relocation) (Peterson 1997). Many of targets are also not amenable to interventions that can be delivered by health, education or social services. Parenting attitudes, beliefs, and practices, which are significant in the aetiology of child maltreatment are, however, amenable to such intervention (Trickett 1988; Pianta 1989; Burgess 1978). Maltreating and abusive parents are less positive, supportive and nurturing of their children, and more negative, hostile, and punitive than non-maltreating parents (Pianta 1989; Burgess 1978). They also react more negatively to ordinary parental challenges such as a crying infant (Frodi 1980), frequently have inappropriate expectations of the child, an inability to be empathically aware of the child's needs, a strong belief in the value of punishment (which can be haphazard, uncontrolled and often represents an impulsive discharge of aggression on the part of the parent), and significant role reversal in which the parent looks to the child for the satisfaction of their own emotional needs (Bavolek 1989). There is also some intergenerational continuity in parenting problems of this nature (around 30%) (Rutter 1989).

Description of the intervention

The parenting programmes that are the focus of this review are short-term interventions aimed at improving the quality of the parent-child relationship by changing parenting practices, aspects of parental functioning such as mental health, attributions and cognitions, the child's emotional and behavioural adjustment, and family functioning more generally. Parenting programmes are now being offered in a variety of settings, and a number of recent systematic reviews suggest that they are moderately effective in the short term in improving maternal psychosocial health (Barlow 2002a), and the emotional and behavioural adjustment of infants and toddlers (Barlow 2005), and older children (Barlow 2000b). There is also evidence to suggest that they are effective in improving outcomes for both teenage mothers and their children (Coren 2001). A recent review of parenting programmes by the National Institute of Clinical Excellence indicated that parenting programmes are cost effective in the treatment of conduct disorder (NICE 2005).

Why it is important to do this review

A review of the effectiveness of both group-based and individual parenting programmes in reducing abuse and neglect is needed for a number of reasons. First, although there have been a number of reviews conducted addressing the effectiveness of family-based interventions in reducing child abuse (e.g. Edgeworth 2000; Oates 1995; Werkele 1993; Wolfe 1993), none of these have focused solely on parenting programmes, some were narrative reviews only, and all were limited in terms of the databases that were searched. Second, there is debate as to whether standard parenting programmes alone i.e. without additional components to address risk factors such as parental anger and stress or parental constructions and attributions, are sufficiently effective to address child abuse and neglect with parents who have a history of such abuse (e.g. Peterson 1997). There is a need to explore the types of parenting programmes that are currently being used to treat such parenting, and to identify the core components necessary for a successful outcome. Third, a recent systematic review of the evidence suggests that parenting programmes maybe cost-effective methods of intervening with families (NICE 2005). However, the majority of families with children on the child protection register do not currently receive any formal intervention to either improve their parenting skills or to protect the child (other than the removal of the child from the home). This situation may reflect the paucity of evidence concerning both effective interventions generally, and the benefits of parenting programmes for high-risk groups of parents more specifically, in addition to financial constraints. A systematic review may therefore provide the research basis for improved policy and practice and a focus for further studies in this area.

OBJECTIVES

To assess the efficacy of group-based and one-to-one parenting programmes in the treatment of child physical abuse and neglect.

METHODS

Criteria for considering studies for this review

Types of studies

Randomised controlled trials in which participants were randomly allocated to either an experimental or a control group, the latter being a waiting-list, no-treatment or placebo control group. Studies that randomised participants to an intervention and alternative treatment group (i.e. without a control group), have also been included.

Types of participants

Studies were eligible for inclusion in the review if the intervention was provided directly to parents of children aged 0 - 19 years. Programmes had to have targeted parents who have a history of physical abuse or neglect.

Types of interventions

Studies evaluating the effectiveness of brief (i.e. between 6 and 30 weeks) individual or group-based parenting programmes that were provided on a targeted basis (i.e. to parents with a history of abuse or at high-risk of abuse) with a view to preventing the (re)occurence of child maltreatment were eligible for inclusion irrespective of the theoretical basis underpinning the programme. Parenting programmes were defined as standardised interventions that are delivered to parents with the aim of changing parenting attitudes and practices, improving parenting skills, reducing parenting stress, improving maternal psychosocial functioning, improving family dynamics or reducing child behavioural problems. The review included parenting programmes that have been modified to meet the specific needs of high-risk parents by for example, adding components focused on anger management, stress management or that involved structured interaction with children.
Multifaceted programmes in which it is not possible to assess the independent affect of the parenting programme and intensive home visiting programmes were excluded from this review.

Types of outcome measures

To be eligible for inclusion in the review, studies must have included as an outcome at least one indicator of abuse, neglect or maltreatment (e.g. placement on the child protection register; maltreatment recorded in medical records), non-organic failure-to-

thrive or out of home placement of the child/change in primary caretaker or measures of outcomes that are strongly associated with abuse such as for example parental psychopathology, parenting attitudes and practices, and family functioning.

Search methods for identification of studies

Electronic searches

The following databases were searched to identify published studies:
The Cochrane Library; MEDLINE; EMBASE; Biological Abstracts; PsycINFO; Sociofile; Social Science Citation Index; CINAHL; Dissertation Abstracts; ERIC; C2-SPECTR, from inception to May 2005.
Unpublished studies were identified using the following sources: NSPCC library and database (UK), Current Controlled Trials, National Research Register (NRR [UK]). Authors of papers included in the review were also contacted to identify unpublished research. Reference lists of articles identified through database searches and bibliographies of relevant papers were examined to identify further studies.
The following search terms were use:
Child Abuse/ OR
((infan$ or child$ or teen$ or adolesc$ or minor$ or toddler$ or baby or babies) adj3 (maltreat$ or neglect$)).tw. OR
((physical$ or sexual$ or emotion$) adj3 abuse$ adj3 (infan$ or child$ or teen$ or adolesc$ or minor$ or toddler$ or baby or babies)).tw. OR
((intent$ or unintent$) adj3 injur$ adj3 (infan$ or child$ or teen$ or adolesc$ or minor$ or toddler$ or baby or babies)).tw.
AND
(parent$ adj3 (program$ or train$ or educat$ or promot$ or intervent$ or group$ or skill$ or support$)).tw.
The search terms used to identify relevant studies were adapted for use in the different databases. No methodological terms/filters were included to ensure that all relevant papers were retrieved.

Searching other resources

Reference lists of articles identified through database searches and bibliographies of systematic and non-systematic review articles were examined to identify further relevant studies. No language restrictions were applied.

Data collection and analysis

Selection of studies

An initial search of titles was undertaken by one reviewer (IJ). Titles and abstracts of studies that appeared relevant were then assessed independently by two reviewers (IJ and JB) to determine whether they met the inclusion criteria. Abstracts that did not meet the inclusion criteria were rejected. Two reviewers (JB and IJ) independently assessed full copies of papers that appeared to meet the inclusion criteria. Uncertainties concerning the appropriateness of studies for inclusion in the review were resolved through consultation with a third reviewer (SS-B).

Data extraction and management

Data were extracted independently by two reviewers (JB, IJ) using a piloted data extraction form. Information was extracted regarding intervention aims, population characteristics, theoretical background, programme duration and content. With regard to the evaluation, data were extracted on the study design, group allocation, sample size, whether confounding factors were controlled, outcomes measured (validity; reliability, when assessed; whether blinded), participant attrition, and results. Where data were not available in the published study reports, authors were contacted to supply missing information.

Assessment of risk of bias in included studies

Quality Assessment

Unblinded critical appraisal of the included studies was conducted independently by two reviewers (JB, IJ). Studies were allocated to one of three quality categories according to the following criteria used in the Cochrane Collaboration Handbook (Higgins 2005). Category 'A' indicated the use of an adequate method of allocation concealment (for example, by telephone randomisation, or use of consecutively numbered, sealed, opaque envelopes). Category 'B' indicated uncertainty about whether the allocation was adequately concealed (for example, where the method of concealment was not known). Category 'C' was used to indicate that the method of allocation was not adequately concealed (for example open random number lists or quasi-randomisation using alternate numbers). Other aspects of study quality were also assessed including use of intention-to-treat analysis, standardised outcomes, blinding of assessors, distribution of confounders and numbers of participants.

Measures of treatment effect

Continuous data were presented as effect sizes if means and standard deviations were available. Effect sizes were obtained by dividing the mean difference in post-intervention scores (adjusted for baseline scores where available) for the intervention and treatment

group by the pooled standard deviation. The results for each outcome in each study have been presented, with 95% confidence intervals. An effect size of 0.2 is small; an effect size of 0.5 is medium; and 0.8 or greater is large (Cohen 1969).
Where means and standard deviations were not available, and the author has been unable to provide them, significance levels are reported instead.

Dealing with missing data

Missing data and dropouts were assessed for each included study and the review reports the number of participants who have been included in the final analysis as a proportion of all participants in each study. Reasons for missing data are provided in the narrative summary.

Assessment of reporting biases

No exploration of publication bias was undertaken.

Data synthesis

It was not possible to combine any of the results in a meta-analysis due to the fact that there were very few compatible outcome measures. Furthermore, it was felt that given the large and overall incompatible nature of the outcome measures on which data were extracted, meta-analysis for the few conceptually similar outcomes was not justified.

Subgroup analysis and investigation of heterogeneity

An assessment was made of the extent to which there were variations in the population, intervention or outcome. No meta-analyses were undertaken, and it was not therefore possible to assess heterogeneity using the Chi-square test (Higgins 2002). No subgroup analyses were undertaken.

Sensitivity analysis

It was not possible in the current study to undertake any sensitivity analyses due to the fact that no meta-analyses were conducted.

Updating the review

The review will be updated every two years in accordance with Cochrane Collaboration policy.

RESULTS

Description of studies

See: Characteristics of included studies; Characteristics of excluded studies.

Results of the search

All databases searched yielded abstracts, and there were a number of duplicates between the databases. Six hundred and fifty abstracts were identified and reviewed.
Of the 650 abstracts 518 proved to be of no direct relevance to the review. Of the 132 studies reviewed only 26 were relevant and of these only 7 were suitable for inclusion.

Included studies

Of the seven included reviews, three utilised a control group (Hughes 2004; Terao 1999; Wolfe 1981) and four used an alternative treatment group (Chaffin 2004; Kolko 1996; Brunk 1987; Egan 1983).

1.1 Populations

Five of the treatment studies comprised physically abusive parents (Kolko 1996;Terao 1999; Chaffin 2004; Hughes 2004; Egan 1983; Wolfe 1981). One study included physically abusive and neglectful parents (Brunk 1987), and a further study failed to specify the type of abuse (Hughes 2004).

1.2 Interventions

The two most recent studies were conducted in 2004 (Chaffin 2004; Hughes 2004). One of these (Chaffin 2004), compared the effectiveness of a standard community-group psychoeducational (didactic) programme comprising sessions about listening, the influence of the parents' own upbringing, child development, positive discipline, and anger management with parent-child interaction therapy (PCIT) (or PCIT plus individualised enhanced services - not included in this review). The PCIT programme comprised six group-based sessions focused on increasing parental motivation, followed by clinic-based individual parent-child dyad sessions focusing on enhancing skills and establishing daily positive parent-child interaction, followed by command-giving and positive discipline using live coached parent-child dyad sessions. Both programmes were delivered over three modules (comprising thirty sessions). The second study (Hughes 2004) evaluated the effects of the Webster-Stratton Incredible Years programme on the parenting skills of maltreating mothers and on the autonomy of their children. The programme was delivered over the course of eight two-hour weekly sessions and was designed to assist parents in learning how to modify their parenting practices following home visits to assess parent-child interaction.
The two next most recent studies were conducted in the nineties (Terao 1999; Kolko 1996). The first of these (Terao 1999) evaluated the effectiveness of parent-child interaction therapy (PCIT) designed to change patterns of dysfunctional parent-child relationships. The programme was delivered over fourteen weekly sessions and comprised behaviour management and communication

skills training. The second study (Kolko 1996) compared the use of cognitive behavioural therapy (CBT) designed to modify risk factors associated with child physical abuse with an ecologically-based family therapy (FT) programme focused on family interaction. Both services comprised twelve one-hour weekly clinic sessions with follow-up home sessions to evaluate progress.

The remaining three studies were conducted in the eighties (Brunk 1987; Egan 1983; Wolfe 1981). Brunk 1987 compared the effectiveness of eight weekly group-based parent-training sessions of 1.5 hours duration, focused on human development and child management skills with the use of a clinic-based multi-systemic family therapy comprising individual family-tailored behavioural management strategies. Egan 1983 compared a behavioural child management programme with a stress management training aimed at improving parental emotional control and including relaxation skills training and cognitive restructuring (n.b. this study also includes a combined stress and child management group, but the results for this are not reported separately). Wolfe 1981 evaluated the effectiveness of a group-based parenting programme comprising instruction in child management techniques, problem solving and modelling of appropriate child management using videotaped vignettes, and self-control using deep muscle relaxation. The intervention also included individualsed home-based training procedures in which the families were visited once a week at home to encourage the implementation of new techniques.

Outcomes

Three studies provided an objective assessment of abuse by examining the impact of the intervention on incidence of child abuse (i.e. reported or suspected by caseworkers) (Wolfe 1981), number of injuries (Kolko 1996), or reported (school staff, relatives or family members) physical abuse (Chaffin 2004). The remaining studies all provide assessments of proxy measures of abusive parenting only. Most studies used parent reports of a range of outcomes including parental psychopathology, anger, stress, depression, social skills, child abuse potential, and family functioning. One study also included child reported outcomes (e.g. parental anger; family problems) (Hughes 2004). Four treatment studies reported independent assessments of parental outcomes such as researcher observed child management skills (Chaffin 2004; Hughes 2004; Brunk 1987; Egan 1983).

Excluded studies

The main reasons for exclusion were that the study did not involve the randomisation of participants, did not target parents that had a history of abuse, or did not evaluate a parenting programme that met the inclusion criteria.

Risk of bias in included studies

USE OF RANDOMISATION

Of the 7 included studies, four were randomised controlled trials in which parents were randomly allocated to a treatment group or a no-treatment/waiting list control group (Hughes 2004; Terao 1999; Egan 1983; Wolfe 1981). The three remaining studies randomly allocated families to an intervention group or alternative treatment control group (Chaffin 2004; Kolko 1996; Brunk 1987). One study randomised families to a control group or three alternative treatment groups but only reported the findings for the treatment groups (Egan 1983).

ALLOCATION CONCEALMENT

None of the included studies provided information regarding the method of allocation concealment.

INTENTION-TO-TREAT

None of the studies analysed participants in the groups to which they were randomised irrespective of whether they dropped out or were lost to follow-up (i.e. intention-to-treat).

One study failed to provide details about whether participants dropped out of the evaluation or were lost to follow-up (Terao 1999). The average dropout appeared to be in the region of 10% with as many as 23% in one study (Brunk 1987). In one study dropout was associated with baseline measures of parents experiencing less stress and having fewer problems (Brunk 1987), and in a second with with being younger, better educated and less depressed, but having less social support (Hughes 2004).

STANDARDISED OUTCOMES

The majority of included studies used standardised measures. Two studies used non-standardised outcome measures that were designed specifically for the purpose of the study (Hughes 2004; Kolko 1996).

BLINDING OF ASSESSORS

In trials of parenting programmes it is not possible to blind either facilitators or parents to the type of treatment being implemented or received. One of the methods of minimising bias arising from failure to blind parents and study personnel is to blind assessors of clinical outcomes. Only three studies report that independent assessment was undertaken blinded (Chaffin 2004; Brunk 1987; Wolfe 1981). No independent assessments of outcome were undertaken by Kolko 1996 or Terao 1999. One study submitted the coding of parent-child interaction for independent assessment by a panel of experts to reduce bias but makes no mention of blinding (Hughes 2004). One study used independent assessment but did not state that blinding was undertaken (Egan 1983).

DISTRIBUTION OF CONFOUNDERS

While the use of randomisation should in theory ensure that any possible confounders are equally distributed between the groups, the randomisation of small numbers of study participants may result in an unequal distribution of confounding factors. All studies provided information about the distribution of possible confounders (i.e. to what extent the control and intervention groups were similar at the start of the trial).

NUMBERS OF PARTICIPANTS

The number of participants in each study ranged from 16 (Wolfe 1981) to 110 (Chaffin 2004). Some of the studies may therefore have been underpowered.

Effects of interventions

The results have been summarised using the following categories:
SECTION A1. RESULTS OF TREATMENT STUDIES USING A CONTROL GROUP (n=3)
SECTION A2. RESULTS OF TREATMENT STUDIES USING AN ALTERNATIVE TREATMENT GROUP (n=4)
An effect size of 0.2 is small; an effect size of 0.5 is medium; and 0.8 or greater is large (Cohen 1969).
Effect sizes in the following region indicate (Edgeworth 2000):
0.1 the average treated case was functioning better than 54% of untreated cases (i.e. not much better than chance)
0.3 the average treated case was functioning better than 62% of untreated cases
0.5 the average treated case was functioning better than 69% of untreated cases
0.7 the average treated case was functioning better than 76% of untreated cases
0.9 the average treated case was functioning better than 82% of untreated cases
1.1 the average treated case was functioning better than 86% of untreated cases
1.3 the average treated case was functioning better than 90% of untreated cases
1.5 the average treated case was functioning better than 93% of untreated cases
1.7 the average treated case was functioning better than 96% of untreated cases
1.9 the average treated case was functioning better than 97% of untreated cases
2.0 the average treated case was functioning better than 59% of untreated cases

SECTION A1. RESULTS OF TREATMENT STUDIES USING A CONTROL GROUP (n=3)

Parent Outcomes

A1.3 Child Abuse and Child abuse potential

Wolfe 1981 compared agency records of child abuse or maltreatment for both arms of the study. The results show that at one-year follow-up there were no reports of abuse in the intervention arm compared with one report in the control group. In addition, supervision had been terminated for all eight treatment families compared to six control families. No significance levels or confidence intervals are provided.

Terao 1999 evaluated the effectiveness of the above programme on child abuse potential using the Child Abuse Potential Inventory. The result shows a large significant difference favouring the intervention group -0.99 [-1.71 to -0.27].

Chaffin 2004 evaluated the effective of parent-child interaction therapy (PCIT) on reports of physical abuse. The result shows that significantly fewer intervention families (36%) had a re-report of physical abuse compared with a control group (49%) (or another extended PCIT programme - 36%) (p=.02).

A1.2 Parenting Skills

Hughes 2004 evaluated the effectiveness of the Webster-Stratton Incredible Years Programme on a number of aspects of parenting skills of maltreating mothers including parental autonomy, structure and involvement. This study used a number of independent assessments of outcomes based on non-standardised measures that were designed specifically for the purpose of the study. The results show medium to large but non-significant differences favouring the intervention group for free-play -0.76 [-1.56 to 0.04] and ring toss -0.34 [-1.12 to 0.43]. The results show a large significant difference favouring the intervention group for parental autonomy-support -0.89 [-1.70 to -0.08], and a medium non-significant result favouring the intervention group for parental autonomy - ring toss -0.26 [-1.04 to 0.51]. The results for parenting structure (i.e. their capacity to structure play) show contradictory results - no effect for free play 0.00 [-0.77 to 0.77] and a small non-significant effect for ring toss -0.34 [-1.12 to 0.44].

Wolfe 1981 examined the impact of a behavioural parenting programme in improving researcher ratings of child management skills using the child managment subscale of the Parent-Child Interaction Form (PCIF). Standard deviations were not reported for both arms but the results of a multivariate analysis of covariance show a significant difference favouring the intervention group (p= 0.01).

A1.3 Parental Stress

Terao 1999 evaluated the effectiveness of parent-child interaction therapy on parental stress using the Parenting Stress Inventory. The result shows a small to medium non-significant effect favouring the intervention group -0.36 [-1.04 to 0.31].

Child Outcomes

A1.4 Child Behaviour

Terao 1999 measured child behaviour using the Eyberg Child Behaviour Inventory. The results show large significant differences favouring the intervention group for intensity of behaviour problems -0.72 [-1.41 to -0.02] and for the number of problems -1.81 [-2.63 to -1.00].

Wolfe 1981 assessed the impact on child behaviour using the intensity and problem subscales of the Eyberg Child Behaviour Inventory. No standard deviations are reported but the results of a multivariate analysis of covariance show no significant differences for either intensity (p=0.94) or number of problems (p=0.94) once other factors had been controlled for.

A1.5 Child Autonomy

Hughes 2004 evaluated the effectiveness of the Webster-Stratton Incredible Years Program on child autonomy. It should be noted that this outcome was assessed using a non-standardised measure that was designed specficially for the purpose of the study. The

result shows a medium non-significant result favouring the control group for free play 0.45 [-0.33 to 1.23] and no effect for ring toss 0.18 [-0.59 to 0.95].

Family Outcomes

A1.6 Case worker ratings of family treatment needs

Wolfe 1981 provided an assessment of caseworker ratings of family treatment needs post-intervention. The results of a Multivariate Analysis of Covariance show no significant difference between the two groups.

SECTION A2. RESULTS OF TREATMENT STUDIES USING AN ALTERNATIVE TREATMENT GROUP (n=4)

Parent Outcomes

A2.1 Child Abuse Potential

Chaffin 2004 compared a standard community group-based parenting programme with a clinic-based one-to-one parent-child interaction training (PCIT) programme on child abuse potential using the Child Abuse Potential Inventory. The results showed no difference between the two groups 0.03 [-0.42 to 0.48].

Chaffin 2004 also used the CAPI to measure parental rigidity, distress, loneliness, and problems with children. The results show a small to medium non-significant effect favouring PCIT in parental rigidity 0.41 [-0.04 to 0.86] and problems with children 0.39 [-0.06 to 0.85]. There was no difference between the two groups for parental distress 0.11 [-0.56 to 0.34] or parental loneliness 0.05 [-0.49, to 0.40].

A2.2 Parental Discpline/Reports of Injury

Kolko 1996 compared the use of cognitive behavioural training (CBT) with family therapy (FT), on percentages of physical discipline/force, and physical injuries reported by the two treatment groups. There were significant fewer percentages of force by CBT than FT children (p<0.007), and parent rating also revealed a significantly fewer reports for CBT (p<0.04). There were, however, no significant differences in the in the percentage of reports of actual injuries - there was only one parent-report of injury for the CBT group, and the small number of cases precluded statistical comparison (Kolko 1996).

A2.3 Parenting Behaviours

Chaffin 2004 measured parenting behaviours using the the Dyadic Parent-Child Interaction Coding System (DPICS). The results show a medium sized significant improvement in positive parent behaviour towards the child for the PCIT group 0.50 [0.04 to 0.95] and a large significant effect for reduced negative parent behaviour towards the child 0.75 [0.29 to 1.22].

Egan 1983 compared the effectiveness of a behavioural parenting programme with a stress management programme, on a number of aspects of parental behaviour (verbal attacks, verbal commands, verbal reasoning, positive verbals, punitive restraints etc) using behavioural observation and behavioural role play. No standard deviations were provided, but the results of an analysis of covariance show that there were significant changes favouring the child management group for three domains only - behavioural observation of parents saying nothing (p<0.05) and compliance followed by child positive response (p<0.05). The results for the stress management group show improved positive affect (P<0.05), verbal commands (p<0.05), and child positive affect (p<0.05).

A2.4 Parental Anger

Kolko 1996 compared the use of cognitive behavioural training (CBT) with family therapy on parental anger using parent and child-reports about severity of anger arousal displayed by parents towards their children. The results show a large significant effect in favour of the CBT group for child-reports of parental anger -1.21 [-1.91 to -0.51] and a medium but non-significant effect in favour of the CBT group in parent-reports -0.45 [-1.10 to 0.19].

A2.7 Parental Competence

Brunk 1987 compared the effectiveness of parent-training and multistemic therapy on a number of aspects of parental control strategies using observational methods to assess three interaction patterns related to child maltreatment - parental effectiveness, child passive noncompliance, and parental unresponsiveness. The results show that neglectful families who received multi-systemic therapy and the abusive families who received parent-training showed improved parental effectiveness-attention (p<0.029). There were no significant improvements in parental effectiveness-action or child passive non-compliance or parental unresponsiveness following the parent training, but significant effects for multi-systemic therapy in two domains of child passive non-compliance ('contact - verbal attention - contact '[p=0.012] and 'oriented - verbal action - oriented' [p=0.031]) and for one domain of parental unresponsiveness (oriented verbal attention - oriented). However, there was a significant pre-post effective across groups in 'oriented - verbal attention - task completion' sequences following treatment (p=0.035) (no effect sizes and 95% confidence intervals were calculated because the authors do not report means or standard deviations).

A2.8 Treatment outcome

Brunk 1987 evaluated three aspects of functioning from the perspective of both therapist and client (individual; family; social system). The results show significant effects for treatment on two outcomes: significant pre-post interaction effects were observed for client ratings of social system problems (p=0.022) and therapist ratings of family problems (p=0.007). Parents who received parent-training reported a significant decrease in social system problems, whereas parents who received multi-systemic therapy did not. However, the multi-systemic therapists reported a greater decrease in family problems than the parent-training therapists. In addition, there were five significant univariate pre-post effects across groups. Parents reported a decrease in the severity of individual (p=0.001) and family (p=0.001) problems and therapists reported decreases in individual (p=0.001), family (p=0.001) and social system (p=0.018) problems.

Child Outcomes

A2.9 Child Behaviour

Chaffin 2004 measured child behaviour using the Behaviour Assessment System for Children (BASC). The results show no difference between the two groups for externalising problems 0.06 [-0.39 to 0.51] or internalising problems -0.02 [-0.47 to 0.43].

Family Outcomes

A2.10 Family Problems

Kolko 1996 compared the use of cognitive behavioural training (CBT) designed to modify risk factors associated with child physical abuse with family therapy on family problems using the Family Environment Scale. The results show a large significant effect in favour of CBT for child-reported family problems -0.96 [-1.64 to-0.28] but no difference between the two groups for parent-reported family problems 0.00 [-0.64 to 0.64].

Egan 1983 also assessed family environment using the Family Environment Scale**.** No standard deviations were available with which to calculate effect sizes but the results of an analysis of variance show a significant result favouring the stress managment group for the conflict subscale ($p<0.05$).

A2.11 Family Life Events

Brunk 1987 measured family events using the Family Inventory of Life Events. The results show significant pre-post effects across both treatment groups ($p=0.011$), parents reporting a reduction in overall stress.

Egan 1983 measured family events using the Recent Events Survey. No standard deviations were available with which to calculate effect sizes but the result of a two-way analysis of variance show a significant result favouring the Stress managment group ($p<0.05$).

DISCUSSION

Overall, only three of the included studies assessed the impact of the programme on objective measures of child abuse. This may reflect the fact that such assessments require long-term follow-up, and the majority of included studies provided immediate post-intervention assessment only. Small numbers precluded the possibility of drawing any definitive conclusions, but one study suggests that parent-child interaction therapy can reduce re-reports of physical abuse.

Data were extracted on a range of measures that may be used as proxy assessments of abusive parenting. The effect sizes obtained are on the whole only small to medium. Furthermore, while most of the results favoured the intervention group, many also failed to achieve statistical significance. This result was possibly due to the small sample sizes in many of the included studies. However, due to the large number of diverse outcomes that were used it was not possible to test this using meta-analysis.

There is in addition, some variability in the results across trials, and this may be due to the fact that the quality of the included studies is variable. Four studies used an alternative treatment group as opposed to a control group, and many of the studies failed to provide details about allocation concealment or whether the analysis was conducted on an intention-to-treat basis. The results from these studies, should therefore, be treated with caution.

In terms of the applicability of the results, the studies mostly comprised physically abusive parents, and the results of this review may not therefore apply to neglectful parents. While many of the included papers provide further information about the broader risk status of the parents in terms of poverty, education and ethnicity, it is not clear to what extent the included parents were homogenous in terms of their use of physical abuse. This makes it difficult to know exactly which group of physically abusing parents are most likely to benefit from a parenting programme.

The studies that used an alternative treatment group (as opposed to a control group) permitted some assessment as to whether programmes that incorporate additional components aimed specifically at addressing factors such as parental anger, motivation, and parent-child interaction, are more effective than standard programmes. While many of the findings failed to achieve significance, some of the effect sizes in the region of 0.3 - 0.4 favoured programmes that had either additional components or that were based on the use of theoretical approaches specifically aimed at addressing problems associated with abusive parenting. For example, one parent-child interaction therapy parent training (PCIT) programme that focused specifically on increasing parental motivation followed by sessions focused specifically on parent-child interaction was shown to be more effective than a standard psychoeducational (didactive) parent-training programme. These results are, however, confounded by the fact that the PCIT programme was provided on a one-to-one basis in a clinic while the psychoeducational programme was provided on a group-basis in the community (i.e. the enhanced results for PCIT may be due to the use of one-to-one sessions rather than the content of the sessions). One further study that compared stress training with child management training produced slightly better results for the stress group in terms of child positive affect. This is an interesting finding and may point to the fact that the use of child management techniques on their own i.e. without changing other aspects of the parents behaviour such as mood or stress, are less effective in terms of the child's wellbeing. This study also showed that the group that combined both stress and child management training faired less well in comparison with the stress management or child management groups independently, but this may be due to the fact that it only comprised half of both of the 'pure' training programmes. Overall, these comparative studies suggest that parenting programmes that incorporate additional components aimed specifically at addressing problems associated with abusive parenting (e.g. excessive parental anger, misattributions, poor parent-child interaction) may be more effective than parenting programmes that do not incoporate these. However, further research

is needed to assess which components should be provided as core components of parenting programmes for physically abusive parents.

AUTHORS' CONCLUSIONS

Implications for practice

Studies that have incorporated measures of the incidence of physical abuse (e.g. reports of chid abuse, numbers of injuries) provide no evidence to support the use of parenting programmes to treat physical abuse. There is limited evidence that some parenting programmes may be effective in improving some outcomes that are associated with physically abusive parenting. There is also limited evidence to suggest that programmes that provide additional components aimed specifically at addressing factors associated with physically abusive parenting such as anger and stress, may be more effective compared with parenting programmes that do not include such components. In the absence of a robust meta-analysis, these conclusions are, however, impressionistic. Very few of the included studies targeted neglect, and the results of this review may therefore not apply to neglectful parents.

The available evidence points to the potential value of programmes that are based on approaches such as cognitive behavioural therapy and child-parent interaction therapy. Other well recognised interventions such as the Webster-Stratton programme - itself within the cognitive-behavioural paradigm - also appear to have a role in treating outcomes that are associated with abusive parenting. While behavioural child management programmes appear to have some benefit, they may need to be more broadly focused to secure improvements in other aspects of parenting such as positive child affect (Egan 1983). Examples of other components include those that address parental mood or stress.

While none of the programmes were effective across all of the outcomes measured, many appeared to have improved some outcomes for some of the participating parents. Parenting programmes, particularly those that are group-based, are increasingly being recognised as being a cost-effective way of intervening to improve parenting (NICE 2005), and to provide parents with access to other sources of peer-based support. Overall, while the evidence in inconclusive, there are few other interventions that have better established levels of empirical support as regards intervening with physically abusive parents. The use of parenting programmes that are based on some of the theoretical models (e.g. parent-child interaction therapy and CBT) evaluated as part of the current review may therefore be justified.

Implications for research

Child abuse is a hugely important problem for which there is currently little evidence available of effective treatments. The findings of this review are suggestive that parenting programmes may improve some of the outcomes associated with physically abusive parenting, but the quality of much of the included research failed to meet accepted standards. There is an urgent need for more rigorous evaluations of the effectiveness of parenting programmes in the treatment of physical child abuse, and also neglect. Future research should address some of these methodological deficiencies including the use of random allocation, and blinded assessment of outcome. More specifically, while the current review provided over fifty assessments of outcome, only a very limited number of these could be combined in a meta-analysis due to the absence of compatible measures. The majority of studies used measures of a range of outcomes focusing on different aspects of parental, child and family functioning, and very few included an assessment of the impact of the intervention on the use of physical force or injuries. This suggests the need for researchers to identify common outcomes that can be assessed using standardised measures,

and for the inclusion of objective assessments of the impact of parenting programmes on the incidence of child abuse using outcomes such as the number of children on the child protection register and number of injuries. Perhaps most importantly, such assessments will not be possible without the funding of much longer-term studies. Furthermore, the wide confidence intervals that were obtained for most of the included studies may have been due to the small sample sizes, and future research should involve the recruitment of larger samples thereby reducing the likelihood of weak statistical power. There was also an increased likelihood of type I errors due to the testing of multiple outcomes, pointing to the need for future studies to focus on specific outcomes on which it has been hypothesised that the intervention will have an impact.

A number of important questions remain to be addressed concerning the effectiveness of parenting programmes in the treatment of physical child abuse and neglect. These include which type of programme is most effective in improving outcomes for abusive parents (it seems likely that programmes focusing on abusive parenting will be less suitable to address the problems of neglectful parents), and what are the key components of effective programmes; whether different programmes vary in the impact they have on the different outcomes; whether some high risk parents are more likely to drop out of parenting programmes and what can be done to increase their compliance. Further research is also needed about the additive effect of parenting programmes that are provided in conjunction with other prevention or treatment programmes e.g. home visiting; family therapy.

Research is also needed that focuses on the process of programme delivery. Few of the included studies made any reference to this issue. Buttigieg 1995 describes difficulties in evaluating parenting programmes for vulnerable clients and describes the use of 'hard outcome measures' as limited when compared with qualitative outcomes such as support, empowerment and the relationship between the professional and the client. Furthermore, Buttigieg

suggests that in many cases, this type of factor can play an important role in influencing outcomes such as the risk of child abuse or reception into care, and that future evaluation should include their assessment.

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* *Indicates the major publication for the study*

CHARACTERISTICS OF STUDIES

Characteristics of included studies *[ordered by study ID]*

Brunk 1987

Methods	RCT with pre and post-intervention measures; no follow-up
Participants	43 abusive or neglectful families
Interventions	Comparison of Parent training (n=17) and Multi-systemic therapy (n=16)
Outcomes	Self-report and observational measures of i) Individual functioning; ii) family relations; iii) stress and social support
Notes	Treatment study; uses and alternative treatment control group; no standard deviations reported Does not provide means or standard deviations

Risk of bias

Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Chaffin 2004

Methods	RCT with pre and post intervention measures; no follow-up
Participants	110 physically abusive parents
Interventions	Parent -child interaction therapy (PCIT) (n=42); and Standard community based parenting group (n=35)
Outcomes	Behaviour assesment system for children; Child abuse potential ; Dyadic parent-child interaction
Notes	Treatment study; Uses an alternative treatment control group

Risk of bias

Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Egan 1983

Methods	RCT with pre and post intervention measures; no follow-up
Participants	30 physically abusive parents
Interventions	Parenting group (n=11); parenting group plus stress management (n=9); control group (n=10)
Outcomes	Family environment; parenting practices
Notes	Treatment study; utilises a waiting list control group but does not report; the results separately, therefore included in alternative treatment group; no standard deviations reported

Risk of bias

Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Hughes 2004

Methods	RCT with pre and post intervention measures; no follow-up
Participants	26 maltreating (type not specified) families from three child protection agencies
Interventions	Webster-Stratton parenting programme (n=13); waiting list control group (n=13)
Outcomes	Parenting Skills; child autonomy; maternal depression; family problems; social support
Notes	Treatment study

Risk of bias

Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Kolko 1996

Methods	RCT with pre and post intervention measures; no follow-up
Participants	38 maltreating (severe punishment and neglect) families
Interventions	Parent cognitive -behavioural group (CBT) (n=21); Family therapy (FT) (n=17)
Outcomes	Parental anger; physical discipline/force; familyproblems

Kolko 1996 (*Continued*)

Notes	Treatment study; uses an alternative treatment control group

Risk of bias

Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Terao 1999

Methods	RCT with pre and post intervention measures; no follow-up
Participants	34 phsically abusive families
Interventions	Parent-child interaction therapy (n=17); standard family preservation services (n=17)
Outcomes	Parental stress; child abuse potential; child behaviour
Notes	Treatment study

Risk of bias

Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Wolfe 1981

Methods	RCT with pre and post intervention measures; 10-week follow-up of 5 treatment families only; one-year follow-up of incidence of abuse
Participants	16 physically abusive parents
Interventions	Behavioural individually delivered parenting programme (n=8); standard services control group (n=8)
Outcomes	Incidence of child abuse' child management; child behaviour; home environment; caseworker reports of family problems
Notes	Treatment study; no standard deviations reported for control group

Risk of bias

Item	Authors' judgement	Description

Wolfe 1981 (*Continued*)

Allocation concealment?	Unclear	B - Unclear

Characteristics of excluded studies *[ordered by study ID]*

Study	Reason for exclusion
Cheng 2004	Secondary prevention not treatment
Crum 2000	Not RCT
Feldman 1992	Intervention too long
Fetsch 1999	Not RCT
Gavlick 2003	Not RCT
Gershalter 2003	Not RCT
Golub 1987	Not RCT
Hansen 1998	Not RCT
Huebner 2002	Not RCT
Irueste-Montes 1988	Not RCT
Iwaniec 1997	Not RCT
Lovell 1997	Not RCT
Luthar 2000	Secondary prevention not treatment
Puckering 1994	Not RCT
Reid 1982	Not RCT
Resnick 1985	Not RCT
Richey 1991	Not RCT
Sanders 2004	Secondary prevention not treatment
Wolfe 1988	Secondary prevention not treatment

DATA AND ANALYSES

Comparison 1. Treatment Programmes

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Intervention vs control	2		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
1.1 Parental involvement - free play	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.2 Parental involvement - ring toss	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.3 Parental autonomy-support - free play	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.4 Parental autonomy-support - ring toss	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.5 Parenting structure - free play	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.6 Parenting structure - ring toss	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.7 Child abuse potential (CAPI)	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.8 Child behaviour (ECBI) - intensity score	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.9 Child behaviour (ECBI) - problem score	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.10 Parental stress (PSI) - Total	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.11 Child autonomy - free play	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.12 Child autonomy - ring toss	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
2 Intervention vs alternative treatment group	2		Std. Mean Difference (IV, Fixed, 95% CI)	Totals not selected
2.1 Parental anger - child report	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
2.2 Family problems - child report	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
2.5 Parental anger - parent report	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
2.6 Family problems - parent report	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
2.19 Child behaviour (BASC) - externalising	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
2.20 Child behaviour (BASC) - Internalising	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
2.21 Child abuse potential (CAPI) - Abuse scale	1		Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable

2.22 Child abuse potential (CAPI) - Rigidity scale	1	Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
2.23 Child abuse potential (CAPI) - Distress scale	1	Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
2.24 Child Abuse Potential (CAPI) - Loneliness scale	1	Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
2.25 Child Abuse Potential (CAPI) Problems with child scale	1	Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
2.26 Positive parent behaviors (DPICS-II)	1	Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable
2.27 Negative parent behaviors (DPICS-II)	1	Std. Mean Difference (IV, Fixed, 95% CI)	Not estimable

WHAT'S NEW

Last assessed as up-to-date: 21 May 2005.

Date	Event	Description
24 June 2008	Amended	Converted to new review format.
11 June 2008	Amended	Minor omission of data from Chaffin 2004 study corrected.

HISTORY

Protocol first published: Issue 3, 2005

Review first published: Issue 3, 2006

Date	Event	Description
23 May 2006	New citation required and conclusions have changed	Substantive amendment
14 May 2006	Amended	The title of this review has changed from that of the protocol the better to reflect a post-protocol change in focus of the review

CONTRIBUTIONS OF AUTHORS

All authors contributed to the development of the protocol. The search strategy was developed by JB and IS with consultation from Jo Abbott, TSC of the Cochrane Developmental, Psychosocial and Learning Problems Group. JB, IS and SSB selected and assessed studies for inclusion with the review. JB and IS extracted data and entered it into RevMan for analysis. All authors contributed to final analysis and write-up of the review.

DECLARATIONS OF INTEREST

None known.

SOURCES OF SUPPORT

Internal sources

- University of Warwick, UK.

External sources

- The Nuffield Foundation, UK.

DIFFERENCES BETWEEN PROTOCOL AND REVIEW

The title of the review changed from that of the protocol the better to reflect a post-protocol change in focus of the review (May 2006).

INDEX TERMS

Medical Subject Headings (MeSH)

*Parenting; Child Abuse [*prevention & control]; Randomized Controlled Trials as Topic

MeSH check words

Child; Humans