School-based education programmes for the prevention of child sexual abuse

Cover sheet
Title
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Reviewers

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None known.
Background

Sexual abuse of a child or adolescent is a significant problem to society that can impact negatively on the psychosocial development of children (Fleming 1999). The definition of sexual abuse is not consistent in the literature. Some studies restrict sexual abuse to instances of sexual body contact with the child, such as the fondling of breasts or genitals and/or attempted or completed digital or penile penetration (Wyatt 1999). Others define sexual abuse as any contact that is unwanted and can include the exposure of sexual organs to a child or the viewing of pornographic material in a child's presence (Goldman 1997).

Most cases of child sexual abuse (whether the type of abuse is fondling or completed penetration) go unreported to authorities (Wyatt 1999). Studies of prevalence of sexual abuse of children have collected data by interviewing adults about their childhood experiences. Rates of sexual abuse reported by women in such studies in North America range from 2% to 62%, and by men from 3% to 16% (Finkelhor 1994). Prevalence figures are similar in other developed countries; far fewer studies have been conducted in developing countries.

Risk factors for child sexual abuse include female gender of the child, domestic violence, poor parental attachment, and parental alcoholism (Fergusson 1996, Mullen 1998). Social isolation of girls has been found to almost double the risk of abuse (Fleming 1997). Pre-adolescent children (aged ten to twelve years) are most at risk, with a second smaller peak reported in children aged six to seven years (Finkelhor 1986). The perpetrator is most likely to be a family member or family acquaintance known to the child. Despite identification of these risk factors, sexual abuse has been reported across all demographic, ethnic and family groups, in both males and females, and perpetrators can include those outside the family as well as within it (Finkelhor 1993). There is an association between a history of childhood sexual abuse and adverse psychosocial outcomes in the survivor, such as depression (Roosa 1999), post-traumatic stress disorder (Widom 1999), antisocial and suicidal behaviours (Bensley 1999), eating disorders (Perkins 1999), alcohol and substance abuse (Spak 1998), post-partum depression and parenting difficulties (Buist 1998), sexual re-victimisation and sexual dysfunction (Fleming 1999). Given the retrospective nature of these studies, it is unclear what proportion of survivors go on to experience adverse outcomes and whether these may be the result of other psychosocial factors. One review (Rind 1998) found consistent confounding between child-sexual assault and family environment and concluded that family environment explained more variation in adjustment at adulthood. This study created great controversy when it reported that negative effects of child sexual assault "were neither pervasive or typically intense" (Rind 1998); however, a subsequent study reported that when potential confounders (such as family and social backgrounds) are controlled for through multivariate analysis, the strength of the association between child sexual assault and adult psychopathology is reduced but not eliminated (Fleming 1999).

Education programmes have been developed in an effort to reduce the occurrence of sexual abuse in children and adolescents. Strategies have targeted various audiences including offenders, parents, teachers and medical professionals (Leder 1999). Child-directed abuse prevention programmes have been widely adopted by schools in the western world (Tutty 1997). These programmes aim to transfer the knowledge and self-protective behaviours learnt by the child in the classroom to a real-life situation. Education programmes cover themes such as identifying potential abuse situations, 'good touch' versus 'bad touch' concepts and how and whom to tell if abuse has occurred (Taal 1997). A wide variety of programme formats and teaching styles are used. Some programmes are more passive, such as film, lectures or puppet shows. Other programmes require more active participation such as role-playing and rehearsing protective
behaviours. Despite widespread adoption into the school curriculum, the effectiveness of such programmes remains controversial. Previous evaluations of school-based education programmes include a meta-analysis of 16 published studies (Rispens 1997). Education programmes were found to be effective particularly in preschool children, but knowledge learnt decreased over time. Limitations of this meta-analysis were the inclusion of studies rated as 'low quality' by the authors and those with relatively short follow-up periods. One systematic review of 19 controlled trials reported that education programmes improve knowledge and safety skills but do not reduce the occurrence of sexual abuse (Macmillan 1994). No meta-analysis was performed in this review.

It has been suggested that education programmes can cause harm to the participating child or adolescent (Taal 1997). This is reported to be a common parental concern (Tutty 1997). Some studies report few or no evaluated negative effects on children (Tutty 1997) whereas others suggest potentially harmful sequelae. For example, older children have been found to experience more negative feelings about non-sexual physical touch following participation in the education programme (Taal 1997). Therefore, there is a need to rigorously evaluate the evidence for these programmes both in terms of beneficial and harmful outcomes.

Objectives

The aim of this systematic review will be to determine if school-based education programmes are effective in increasing children and adolescents' knowledge about sexual abuse and self-protective behaviours. Specifically:

1. To determine if school-based programmes are effective in improving the knowledge of school-aged children about sexual abuse and self-protective behaviours;
2. To determine if learned knowledge of sexual abuse and protective behaviours is retained over time;
3. To determine if participating in a school-based programme about sexual abuse produces any harm;
4. To determine if there is an increase in disclosure of sexual abuse in school-aged children following participation in a school-based programme;
5. To determine if programme type (active or passive involvement of the child) or setting (primary or secondary school) affects the child or adolescent's ability to gain knowledge and protective behaviours about sexual abuse.

Criteria for considering studies for this review

Types of studies

Randomised controlled trials or quasi-random trials where participants were allocated to the intervention or control group by day of the week, alphabetical order, or other sequential allocation such as class or school.

Types of participants

Children and adolescents attending primary or secondary school.

Types of interventions
School-based education programmes for the prevention of sexual abuse will be compared with no intervention or the standard school curriculum. In general, programmes should focus on either knowledge of sexual abuse concepts and/or skill acquisition in protective behaviours.

**Types of outcome measures**
The following child outcomes will be considered important in this review:

- the development of protective behaviours
- knowledge of sexual abuse and abuse prevention concepts
- retention of knowledge over time
- parental or child anxiety
- disclosure of sexual abuse by child or adolescent during or after participating in programmes

Instruments used to measure these outcomes will be confined to those with at least one standardised outcome measure (such as a standardised questionnaire) used for the intervention and control group, pre and post intervention (see below for examples).

Standardised questionnaires may include the 'Children's Safety Knowledge and Skills Questionnaire' (Kraiser 1986), the 'Control in Sexual Conflicts Questionnaire' (Taal 1997), the 'Choice of Safety Strategy Questionnaire' (Taal 1997), the 'What If' Situations Test' (Wurtele 1998) and the 'Personal Safety Questionnaire' (Wurtele 1997).

**Search strategy for identification of studies**

Relevant trials will be identified through searching the Cochrane Controlled Trial Register (CCTR) and the following databases:

- Biomedical Sciences Databases
- MEDLINE
- EMBASE
- PsycINFO
- CINAHL
- Social Sciences Databases:
  - Sociofile
  - Social Science Citation Index
- Others
- ERIC
- Dissertation Abstracts

The following search strategy will be used:

CHILD
CHILD*
TEENAGE*
ADOLESCEN*
(((#1 or #2) or #3) or #4)
SEX OFFENSES
RAPE
INCEST*
School-based education programmes for the prevention of child sexual abuse

(SEX* near OFFENCE*)
(SEX* near OFFENSE*)
(SEX* near ABUS*)
(SEX* near ASSAULT*)
(SEX* near MOLEST*)
(SEX* near CRIM*)
(SEX* near COERC*)
(((((((#6 or #7) or #8) or #9) or #10) or #11) or #12) or #13) or #14) or #15
(#5 and #16)

Search terms will be modified to meet the requirements of individual databases as regards to differences in fields. All terms necessary to the education programmes, and the participant groups will be used. An optimally sensitive search strategy that identifies randomised controlled trials will be used. There will be no language restrictions. Other sources of information to be searched include the bibliographies of systematic and non-systematic reviews and reference lists of articles identified through the search strategy. In order to identify unpublished studies, experts in the field will be contacted by letter.

Methods of the review

Selection of trials
Two reviewers (KZ and SW) will screen the titles and abstracts from the search. Copies of studies that appear to meet the inclusion criteria will be retrieved for full-text assessment and data extraction. Articles that clearly do not fulfil inclusion criteria as judged by titles and abstracts will be rejected. Uncertainties concerning the appropriateness of studies for inclusion in the review will be discussed with a third reviewer (KW).

Assessment of methodological quality
Studies under consideration will be evaluated for methodological quality and appropriateness. Two reviewers (KZ, SW) will independently assign each selected study for allocation concealment to quality categories as described in the Cochrane Collaboration Handbook (Clarke 2003). These are as follows:

(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).

Overall study quality will be assessed on the adequacy of allocation concealment, percentage loss to follow-up, quality of randomisation, intention to treat analysis, standardisation and blinding of outcome assessment. Blinding of education providers and participants is unlikely to be applicable, but blinding of outcome assessors will be rated as "met", "unmet" or "unclear". Any discrepancies will be negotiated with a third reviewer (KW).
Data management
A data extraction form will be developed and data extraction will be performed independently by two reviewers (KZ, SW). Any discrepancies will be negotiated with a third reviewer (KW). The information extracted will include study location, methods, participant details, type of intervention, duration of intervention and outcome. Citations will be organised using Reference Manager. The data will be entered into RevMan 4.2.1 by one reviewer (KZ) and checked for accuracy by the second reviewer (SW). Authors of studies with missing data will be contacted for further information.

Data synthesis
Studies that do not include data provided in a form usable in a meta-analysis will be included in the review in a descriptive analysis.
Assuming two or more studies that are suitable for inclusion are found, and that the studies are considered to be homogenous, a meta-analysis will be performed on the results. Both fixed and random effects analyses will be performed as part of a sensitivity analysis using RevMan 4.2.1, as appropriate. Where some studies randomise participants using a cluster design (eg school, class) variance will be adjusted where the intraclass correlation coefficient is available.

Continuous data
Continuous data will be analysed if (i) means and standard deviations are available and (ii) there is no clear evidence of skew in the distribution. Where scales are measuring the same clinical outcomes in different ways, standardised mean differences will be combined across studies.
Dichotomous/ binary data
Dichotomous data will be analysed by calculation of the odds ratio with the 95% confidence interval.

Missing data
For missing dichotomous data: missing data and dropouts will be assessed for each included study and the review will report the number of participants who are included in the final analysis as a proportion of all participants in each study. Reasons for missing data will be provided in the narrative summary and the extent to which the results of the review could be altered by the missing data will be assessed.

For missing continuous data, a qualitative summary will be provided. The standard deviations of the outcome measures should be reported for each group in each trial. If these are not given, standard deviations will be imputed using relevant data (e.g. standard deviations or correlation coefficients) from other, similar studies (Follmann 1992).

Authors will be contacted to supply data missing from included studies. Missing data and dropouts for included studies will be assessed for the extent to which the conclusions of the study are affected, and this discussed in the review. If data necessary for meta-analysis is not retrievable, available data will be included in the discussion, but excluded from the meta-analysis.

Measures of treatment effect
For individual trials, where possible, mean differences (and 95% confidence intervals) will be reported for continuous variables. For categorical outcomes, the relative risk and risk difference (and 95% confidence intervals) will be reported. For the meta-analysis, where possible, weighted mean differences (and 95% confidence intervals) will be reported for continuous variables, and the relative risk and risk difference (and 95% confidence intervals) for categorical outcomes. Number
needed to treat will be calculated where appropriate.

Sub-group analysis
Subgroup analyses will be conducted, where sufficient data are available, to determine the differential effects according to age and type of interventions as follows:
Subgroup analysis will be undertaken if:
1. clinically different interventions are identified eg passive or active education programme;
2. there are clinically relevant differences between groups of participants - the two major ones being:
   • gender of the children
   • previous reported abuse
   • school setting - primary or secondary school.

Assessment of heterogeneity
Consistency of results will be assessed visually and by examining $I^2$ (Higgins 2002), a quantity which describes approximately the proportion of variation in point estimates that is due to heterogeneity rather than sampling error. We will supplement this with a test of homogeneity to determine the strength of evidence that the heterogeneity is genuine.

Investigation of bias
Funnel plots will be drawn to investigate any relationship between effect size and study precision (closely related to sample size). Such a relationship could be due to publication or related biases or due to systematic differences between small and large studies. If a relationship is identified clinical diversity of the studies will be further examined as a possible explanation (Egger 1997).

Sensitivity analysis
Sensitivity analysis will be conducted to determine the impact of study quality on outcome.
Other references

Additional references

Bensley 1999

Buist 1998

Clarke 2003

Daro 1991

Egger 1997

Fergusson 1996

Fergusson 1997

Finkelhor 1993

Finkelhor 1994
Finkelhor 1995


Fleming 1997


Fleming 1999


Follmann 1992


Goldman 1997


Higgins 2002


Kraiser 1986


Leder 1999


Leventhal 1998


Macmillan 1994

Mullen 1998

Perkins 1999

Rind 1998

Rispens 1997

Roosa 1999

Spak 1998

Taal 1997

Tutty 1997

Widom 1999

Wurtele 1998
Wyatt 1999