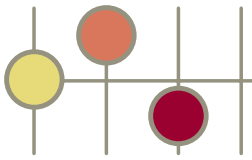

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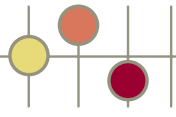

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REPORT 38

Systematic review of the effects of interventions for people bereaved by suicide

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GLOSSARY

Bereavement	The objective situation of having lost someone significant.[1]
Closed membership	Group membership stays the same throughout the sessions.
Grief	Emotional response to personal experience of the loss.
Mourning	The process which occurs after a loss[2] or the acts expressive of grief that are shaped by the practices of a society or cultural group.[1]
Open membership	The membership of a group may change from session to session.
Pathological grief	Grief which represents a deviation from the cultural norm in the time course or in the intensity of grief symptoms.[1]
Postvention	Refers to an intervention for the bereaved after a suicide has occurred. This can include interventions to prevent further suicides and/or help the bereaved cope with their loss. It can encompass support for individuals, community-based or public health interventions, and policy initiatives.[3]
Selection bias	Systematic differences between comparison groups that may lead to different responses to the intervention. Randomisation of participants, with concealment of their group allocation, protects against this.
Suicide ideation	The formation of ideas or mental images of suicide
Suicide survivor	Those bereaved by suicide - often the immediate family members and close friends

LIST OF ABBREVIATIONS

ANCOVA	Analysis of Covariance
ANOVA	Analysis of Variance
BDI	Beck Depression Inventory
BGP	Bereavement Group Postvention
BSI	Brief Symptom Inventory
CBT	Cognitive Behaviour Therapy
CESDS	Centre for Epidemiologic Studies Depression Scale
CDI	Children's Depression Inventory
CONSORT	Consolidated Standards of Reporting Trials
CPS	Centre for Prevention of Suicide
CPSRI	Childhood Posttraumatic Stress Reaction Index
FTT	First Talk Through
GEI	Grief Experience Inventory
GEQ	Grief Experience Questionnaire
GRQ	Grief Recovery Questionnaire
HSIB	Hogan Sibling Inventory of Bereavement
IASP	International Association of Suicide Prevention
IES	Impact of Event Scale
ITG	Inventory of Traumatic Grief
LOSS	Local Outreach to Survivors of Suicide
PD	Psychological Debriefing
PTSD	Post Traumatic Stress Disorder
PWC	Profound Writing Condition
RCMAS	Revised Children's Manifest Anxiety Scale
RCT	Randomised Controlled Trial
SAS	Social Adjustment Scale
SAICA	Social Adjustment Inventory for Children and Adolescents
SD	Standard Deviation
SGP	Social Group Postvention
TREND	Transparent Reporting of Evaluations with Non-Randomised Designs
TRGR2L	Traumatic Grief Evaluation of Response to Loss
TWC	Trivial Writing Condition

EXECUTIVE SUMMARY

Background

In England an estimated 5000 people take their own lives each year. These suicides leave bereaved family, friends, colleagues and others. It is estimated that on average one suicide has a significant effect on six people. One of the aims of the National Suicide Prevention Strategy for England is to promote the mental health of those bereaved by suicide. Evaluation of the available interventions for those bereaved by suicide is believed to be limited. Anecdotal claims and brief reviews of these interventions, suggest that the bereaved have been helped. However, it is unclear what is the optimum type of intervention, for which bereaved individuals and when.

Aim

A systematic review was undertaken with the primary aim of evaluating the effects of interventions aimed at persons bereaved by suicide. A secondary aim was to provide a descriptive overview of interventions for persons bereaved by suicide that have been reported in the literature.

Methods

Search strategy

A total of 37 databases and other resources were searched from their inception to October 2005 and update searches of seven key databases to 1st October 2007. In addition, eight organisations as well as other experts in the field, were contacted, to ask whether they knew of any additional relevant studies. The reference lists of all full papers were scanned for further relevant studies. No language restrictions were applied and non-English language studies meeting the inclusion criteria were translated.

Inclusion criteria

Two reviewers independently screened all titles and abstracts and, where relevant, full papers. Randomised controlled trials (RCTs) and studies with a control or comparison group evaluating any type of intervention, in any setting, for any persons bereaved by suicide were eligible for inclusion. To achieve the secondary objective of the review, relevant studies using all other evaluative designs and studies describing the implementation of an intervention without any evaluation were included.

Data extraction and quality assessment

Data extraction and quality assessment were conducted by one reviewer and checked for accuracy by a second.

Synthesis

Given the diversity of the studies in terms of settings, interventions, outcomes and outcome measures used, a narrative synthesis was undertaken. The study findings were described, organised, explored and interpreted, taking into account the methodological adequacy. Studies included for the purposes of the secondary objective were not synthesised, but have been described briefly to provide an overview of interventions for persons bereaved by suicide that have been reported in the literature.

Results

Eight studies were identified that met the primary inclusion criteria: four RCTs, one controlled study and three observational studies with a control or comparison group, one of which was retrospective. The participants, interventions assessed, outcomes and outcome measures used were diverse across the studies. In six of the included studies the participants had various, mainly familial, relationships to the deceased. One study focused on classmates of the deceased and in one study the relationship was not reported, but the participants rated themselves as being close to the deceased. No controlled

studies were identified that had evaluated interventions directed at healthcare professionals or other occupational groups.

With the exception of one recent RCT, methodological problems were identified in all of the studies. Of the four RCTs, two were truly random, one was not (participants were assigned in alternating order), and one did not report how randomisation was carried out. One reported concealed treatment allocation and none used an intention-to-treat analysis, therefore there is a risk that the effectiveness of the interventions was overestimated. The remaining studies used various methods to assign participants to the intervention and comparison group, all of which had a high risk of selection bias. In most of the studies the groups were not balanced at baseline, or it was unclear whether this was the case. Apart from three studies with a one year follow-up, participants were not followed for a period of time adequate to allow a meaningful assessment of the effectiveness of the interventions. It was also unclear whether the studies were appropriately powered to detect an effect.

There was some evidence of effective interventions. A brief cognitive behaviour therapy family intervention, with a psychiatric nurse resulted in fewer maladaptive grief reactions and less self-blame but there was no benefit for complicated grief, depression or suicidal ideation. A bereavement group intervention for children led by psychologists was more effective than no intervention in reducing anxiety and depression, but not more effective in reducing post traumatic stress, or in improving social adjustment. A group intervention for adults delivered by a health professional and a volunteer resulted in greater changes in eight of the nine emotions assessed than no intervention. An active outreach intervention led to a shorter time taken to seek help at a crisis centre than no intervention. Finally, in a school setting implementation of a crisis intervention involving 'first talk through' and psychological debriefing close to the time of suicide may lead to lower levels of high intensity grief, but not stress response, than a less intense crisis intervention. For the remaining studies either no significant differences were detected between groups or benefits from the intervention were marginal. However, these were all small studies and may not have been appropriately powered to detect an effect.

There were 41 studies that met the eligibility criteria for the second objective. Seven of these studies were evaluative in design, such as before and after studies and observational studies. The interventions evaluated were diverse, though support groups were most common, with mental health professionals, health professionals and volunteers involved in the delivery of the interventions. The remaining 34 studies described the implementation of an intervention, but were not evaluative. Again, the interventions were diverse, though group support and school based interventions were commonly reported. Generally, mental health professionals, health professionals or counsellors delivered these interventions.

Conclusions

The evidence we have identified and appraised is not robust enough to provide clear implications for practice though some tentative conclusions are made about the effectiveness of a psychiatric nurse led CBT family intervention, psychologist-led group therapy intervention for children and a combined health professional and volunteer led group therapy intervention for adults. There is a pressing need for methodologically sound RCTs to confirm whether such interventions are helpful and, if so, for whom.

INTRODUCTION

Bereavement

It is generally accepted that the death of someone close is one of the greatest stressors in life. Grief is the natural reaction to a loss.[1] Such losses can have an impact on the psychological and physical health of the bereaved.[4] Common responses to bereavement include varying levels of negative emotions, such as numbness and disbelief, depression, anxiety and despair. A normal grief reaction has often been characterised as having a series of phases, though response to a bereavement is very individual and there may not be an orderly progression through these: people may move back and forth between the phases and the time frame may vary considerably.[5] Within a few days of the initial shock and disbelief there may be feelings of agitation and pining, which can peak at around two weeks. This may be followed by depressive symptoms which can peak four to six weeks following the bereavement. Then, over time, these emotions lessen.[4] These phases are generally regarded as descriptive guidelines; phases overlap and, as noted above, a movement back and forth between the phases can occur.[1] This staged conceptualisation has been criticised as implying that the bereaved individual passively goes through a series of phases.[2] Worden described the mourning process as a series of tasks that need to be accomplished to adapt to loss: he likened this to Freud's concept of grief work. Four tasks of mourning to be accomplished were identified: accepting the reality of the loss; working through the pain of grief; adjusting to an environment in which the deceased is missing, including internal, external and spiritual adjustments; and, emotionally relocating the deceased and moving on with life.[2]

Grief is a natural, healthy reaction to any significant loss. As well as bereavement, other significant types of loss include incapacitation or disability, job loss and separation from loved ones.[6] A distinction has been drawn between normal and what has been variously called complicated, traumatic or pathological grief. Stroebe et al.[1] have defined pathological grief as grief which represents a deviation from the cultural norm in the time course of the grief response or in the intensity of the symptoms of grief. Diagnostic criteria for complicated or traumatic grief have been proposed by two groups.[7, 8] The majority of bereaved people do not experience pathological grief. When it occurs, however, professional support may be required.[1]

Several theories have been proposed to attempt to explain the way in which the bereaved person responds to their loss. Psychoanalytic theories, stage theories, stress theories and social support theories all suggest that unexpected, sudden losses are more damaging and take longer to resolve than an expected loss.[9]

Bereavement by suicide

In England an estimated 5000 people take their own lives each year.[10] In many countries, suicide is one of the ten leading causes of death and one of the three leading causes of death for young males. It has been estimated that, worldwide every year, up to six million people are bereaved through suicide.[11] This figure is based on earlier suggestions that there are around one million suicide deaths worldwide per year and for each suicide there are, on average, six bereaved individuals who will experience intense grief.

The similarity of response to bereavement by suicide and other forms of bereavement is somewhat unclear, mainly due to a paucity of high quality research. Traditionally, opinion has been that mourning the loss of someone who has died through suicide is a particularly difficult and unique grieving process, different from mourning death from other causes such as illness.[12] The general conclusion of the earlier literature on suicide bereavement was that those bereaved by suicide experienced greater guilt, less social support and felt more of a need to understand why the death occurred than those bereaved by natural causes.[12] However, it has been recognised that there were considerable methodological limitations in this early research, such as a lack of comparison or control groups, small sample sizes and a lack of information or large variation in potential risk factors such as length of time since bereavement and closeness of the relationship.[13, 14]

There now exists a growing body of evidence from comparative studies, which has addressed some of the methodological limitations of earlier work (e.g. larger sample sizes and a variety of standardised

instruments to measure outcomes[13]). This has led to a revised general consensus that there are more similarities than differences between individuals bereaved by suicide and those bereaved through other causes,[11] and that the mode of death plays only a marginal role in adaptation to bereavement.[11, 15]

There are aspects of grieving that have been identified through qualitative research as being characteristic of suicide bereavement, although not necessarily unique. These include shock, disbelief, horror, guilt, blame, anger and the need to know how and why the suicide occurred.[11] Further research has found that those bereaved by suicide tend to feel more ashamed, stigmatised, rejected and abandoned than those bereaved by different modes of death.[16, 17] Although grief responses should never be regarded as universal, these characteristic grief themes mean that there may be some commonalities amongst those bereaved by suicide.[14] This allows some understanding of grief needs and the term 'postvention' has been used to describe interventions for those bereaved by suicide. This can include interventions to prevent further suicides and/or help the bereaved cope with their loss. It can encompass support for individuals, community-based or public health interventions, and policy initiatives.[3]

Many potential predictors of response to bereavement, other than the mode of death, have been identified. These include age of the deceased; relationship to the deceased; age, gender, religion and culture of the bereaved; attitude to the loss; quality of the relationship with the deceased; and time since bereavement.[14] Personality traits, such as being prone to guilt and anxiety, past psychiatric illnesses, and interpersonal risk factors, such as a lack of social support, are believed to have an impact on the grief response.[18] These factors can be categorised as being at the individual, family or global level, all of which may combine in a 'Pandora's box' to have positive or negative influences on bereavement outcome.[16]

Many of the predictive factors for poor bereavement outcomes are more common for people bereaved by suicide, and the grieving processes can often be complicated by pre-existing problems.[19] These factors include a higher prevalence of psychiatric illness in the family, more disturbed family dynamics, more discordant relationships with the deceased, and lack of support in bereavement.[11] This may lead to survivors of suicide being at risk of poor bereavement outcomes, psychosocial problems and suicidal behaviour themselves.[14] The relative importance and interplay between these factors remain unclear.

In any situation, the process of normal adjustment to the loss of a close relationship can take many years and the level of grief has been reported to remain high for up to two and a half, four,[11] and five years.[4] Levels of grief and adjustment are naturally individual reactions which may evolve over time, and intensify at anniversaries and other significant dates. For those bereaved by suicide, there may be specific triggers for intense emotion: at the site of suicide (such as discovering the body and official forensic or resuscitation procedures); twenty-four hours after the suicide (such as telling others about the cause of the death) and at follow-up or review (such as contact with specific agencies). All of these may have an impact on an individual's grief needs and grief response.[11] A study of relatives and friends bereaved through the suicide of an older person (60 years and above) identified media interest in the suicide as a key source of distress for the bereaved.[17] The Coroners' inquest was also identified as a common source of distress.

Who are the people bereaved by suicide?

When considering who might be affected by a suicide, the focus is naturally on immediate family members and close friends, often described as 'survivors' of suicide or survivors after suicide, though there is debate about the most appropriate terminology.[14, 20] However, the determination of exactly who the survivors after suicide are, is subjective. There may be an impact on relatives beyond immediate family, school friends, neighbours, work colleagues or acquaintances. There also may be an impact for complete strangers: those who find the body; train drivers if the death has occurred on the rail network;[21] and for emergency services who attend the scene.[14]

There is evidence that suicide can have a major impact on health professionals. A recent survey was conducted to identify the effect of patient suicide on consultant psychiatrists in Scotland. Of 315 eligible consultants, 247 responded, with 167 of these reporting that a patient under their care had died by suicide. Conclusions based on the "most distressing" suicide experienced by the consultants

suggest that patient suicide has a substantial emotional and professional effect on consultant psychiatrists.[22] Other surveys that considered the experiences of trainee psychiatrists,[23] community mental health teams,[24] and rural general practitioners[25] found that up to 86% of the responders had experienced the suicide of a patient and such experiences had adverse effects on professional practice and personal life.[22]

Interventions available

A survey of all of the representatives of the International Association for Suicide Prevention (IASP) was undertaken in 1997.[26] Of the 52 countries surveyed, 31 responded, and it was found that the number of agencies providing bereavement services varied widely in each country, with some countries reporting that the initiation of services were 'in preparation'. A later survey of 42 European countries was conducted in 2000, of which 31 were IASP members and of these 20 responded.[27] Data on the number of people a service had been provided to, were not available for some of the services, but an approximate estimate of was made of 10,000 people per year receiving a service across all the countries. The greatest number of services was reported in north-western and mid-European countries, with some countries such as Spain and Hungary reporting no services for those bereaved by suicide.

The European directory of available services was published in 2002, and provides brief details of the programmes for people bereaved by suicide.[28] Generally, the survivor programmes identified appear to vary widely, with some being lead by professionals only, survivors only, or a mixture of survivors and trained volunteers, for example Survivors of Bereavement by Suicide and Cruse. Services tended to be directed towards adults who had been bereaved by suicide; the number of services aimed at children or clinicians was low. The majority of programmes were in the form of support groups with either closed (membership stays the same) or open membership (membership keeps changing).[28] It was also stated that a number of 'ad hoc' groups had been formed, mainly by survivors, which proved difficult to monitor and survey.

Evaluation of the postvention programmes that are available is believed to be limited. Anecdotal claims and brief reviews of studies of postvention suggest that the bereaved have been helped.[11] However, there remain gaps in knowledge, such as the optimum type of intervention, for which bereaved individuals and the most appropriate timing for an intervention.

Aims of the project

One of the aims of the National Suicide Prevention Strategy for England is to promote the mental health of those bereaved by suicide.[10] As part of the work to meet this aim, the Department of Health Policy Research Programme commissioned a scoping review of the research literature investigating interventions for people bereaved by suicide.[29] No previous systematic reviews were available of interventions used in the UK or other countries, though primary studies evaluating interventions were identified. The current project is a systematic review of interventions for people bereaved by suicide.

The primary aim of this review was to evaluate the effects of interventions aimed at persons bereaved by suicide. A secondary aim was to provide a descriptive overview of interventions for persons bereaved by suicide that have been reported in the literature: these could either be evaluated interventions (using a non-controlled design) or descriptions of interventions without any evaluation.

METHODS

Search strategy

Literature searches were run to identify published and unpublished studies of interventions for people bereaved by suicide (see Appendix A). Over thirty databases were searched up to October 2005 including MEDLINE, EMBASE, PsycINFO, Science Citation Index, ASSIA: Applied Social Sciences Index and Abstracts, Caredata; Index to Theses, Inside Conferences, International Bibliography of Social Sciences (IBSS), ProQuest Digital Dissertations, Social Policy and Practice Database and Social Services Abstracts. The detailed search strategies are reported in Appendix A.

Update searches were conducted on 1st October 2007, to search for controlled studies only. The searches were run on the seven databases from which relevant studies had been identified in the earlier searches: British Nursing Index, CINAHL, EMBASE, HMIC, Medline, Medline-In process and PsycINFO.

In addition, the following organisations were contacted to ask whether they knew of any other, published or unpublished, potentially relevant studies: The Compassionate Friends; Survivors of Bereavement by Suicide; Cruse Bereavement Care; CALM (Campaign against Living Miserably); PAPYRUS; Samaritans; MIND; SAVE (Suicide Awareness Voices of Education).

The reference lists of all full papers were scanned for further relevant studies. No language restrictions were applied and relevant non-English language studies were translated. Authors were contacted for clarification where necessary. A list of studies meeting the inclusion criteria for the review was circulated to the advisory group and other experts in the field to identify whether they were aware of any studies missing from the list.

Inclusion criteria

Citations from the literature search were downloaded into an Endnote library. Two reviewers independently screened all titles and abstracts. Full paper manuscripts of any titles/abstracts that were considered relevant by either reviewer were obtained where possible. The relevance of each study was assessed according to the criteria set out below. Any discrepancies were resolved by consensus and if necessary a third reviewer was consulted.

Interventions

All types of intervention were eligible for inclusion.

Participants

Adults and children who have been bereaved by suicide either through a personal (or professional relationship in the case of adults) were eligible. There was no restriction on the age of participants or their relationship to the person who had died through suicide.

Outcomes

All outcomes were considered relevant to the review. Qualitative as well as quantitative measures were included.

Study design

To achieve the primary objective of the review, randomised controlled trials (RCTs) and studies with a control or comparison group were eligible for inclusion. Originally the protocol had specified that only RCTs or controlled studies without randomisation, i.e. quasi-randomised studies were eligible. However, this was amended to use a more relaxed definition of 'controlled' following initial screening of the studies as so few studies were identified.

To achieve the secondary objective of the review, relevant studies using all other evaluative designs such as before and after studies and observational studies as well as studies describing the implementation of an intervention for individuals bereaved by suicide were collated.

Data extraction

Data from each study meeting the inclusion criteria were extracted by one reviewer and independently checked for accuracy by a second. Disagreements were resolved through consensus, and if necessary a third reviewer was consulted. Data were extracted into a database set up in Microsoft Access. Following piloting of the database, information about each study was extracted in a systematic way and included: study details; the intervention; the participants; the setting; the outcome measures used and results.

In relation to the studies included for the purposes of the secondary objective of the review, the following information was extracted: country; setting; relationship of participant to the individual who had died; description of the intervention; who delivered the intervention and whether or not a formal evaluation was conducted. These studies were not quality assessed and data on outcomes, where available, were not extracted.

Quality assessment

The quality of the individual studies was assessed by one reviewer and independently checked by a second. Disagreements were resolved through consensus, and if necessary a third reviewer was consulted. Both RCTs and controlled studies were assessed using criteria based on CRD's guidance for undertaking systematic reviews[30] and a recent report on evaluating nonrandomised studies.[31] In order to assess the integrity of the intervention we drew on the Quality Assessment Tool for Quantitative Studies.[32] The results of the quality assessment were used to describe the overall quality of the included studies and not used to score the quality of each individual study. Full details of the quality assessment items used are reported in Appendix C.

Data synthesis

Given the diversity of the studies in terms of settings, interventions, outcomes and outcome measures used, we undertook a narrative synthesis. The narrative synthesis involved describing, organising, exploring and interpreting the study findings, taking into account the methodological adequacy. As part of this process we have investigated the similarities and differences between study findings. This included consideration of the following study dimensions: study design (RCTs and the non-RCTs); quality; whether the study was appropriately powered; intervention characteristics and delivery; participants and outcome measures. Where particular patterns of findings have emerged, we have presented possible explanations for the findings. The guidance developed by Popay and colleagues on conducting narrative synthesis was used to guide the synthesis (http://www.lancs.ac.uk/fass/projects/nssr/index.htm).

Studies included for the purposes of the secondary objective were not synthesised. These are included for illustrative purposes only, to provide a descriptive overview of the range of interventions for persons bereaved by suicide that have been reported in the literature.

Advisory panel

An advisory panel of clinical experts was established on commencement of the project. Comments were invited from the panel on the protocol and the draft report.

RESULTS

In total, the original searches and update identified 4,872 potentially relevant articles. After screening the titles and abstracts of these articles for inclusion in the review, 320 records were ordered as full papers. Of these 320 papers, six could not be screened for inclusion as they were unavailable. A further five full papers were ordered; however in the process of locating them, the authors were contacted and the studies were deemed ineligible and the orders were cancelled. Full details of the studies not screened for inclusion are available in Appendix B.

A total of 309 full papers were screened for inclusion in the review. Eight studies met the eligibility criteria for the first objective.[33-40] The interventions in these studies were described in eight further publications which were excluded.[41-48] There were also 41 studies (described in a further four publications) that met the eligibility criteria for the second objective.[49-89] These were studies that described an intervention without evaluation, or the evaluation was not controlled, for example before and after studies. The interventions in these studies were described in four further publications.[90-93]

A total of 268 papers were excluded from both parts of the review, mainly because there was no intervention, or the intervention was not aimed at people that had been bereaved by suicide, or they were duplicates of papers already ordered. A full list is available from the authors. Six studies were excluded because, although they included participants bereaved by suicide, they also included participants who had been bereaved by other causes but the outcomes for the former were not reported separately.[69, 94-98] These studies were reported in four additional papers.[99-102]

Aim 1: Evidence from controlled studies

We identified eight relevant studies with a control or comparison group. They were published between 1992 and 2007. One French-language paper required translation.[39] There were four RCTs,[35-37, 40] one controlled study[38] and three observational studies with a control group,[33, 34, 39] one of which was retrospective.[34] None of the studies had been conducted in the UK: one was conducted in Finland,[33] one in Canada,[39] one in the Netherlands[40] and five were conducted in the USA. The number of participants ranged from 44 to 134 across the studies. Table 1 provides a summary of the main study characteristics and further details are provided in the data extraction tables (Appendix D).

Participants

In six of the included studies the participants had various relationships to the deceased. In five of these the relationships were mainly familial, such as spouse, son or daughter.[34, 37-40] One study focused on classmates of the deceased, including friends and non-friends;[33] one included spouses of the deceased only;[35] and in one study the relationship was not reported.[36] No controlled studies were identified that had evaluated interventions directed at healthcare professionals or other occupational groups.

Methods of recruitment to the interventions were researcher recruitment,[36, 37, 40] professional referral[33, 34] and recruitment from multiple sources such as self referral and professional referral.[35, 38, 39]

Due to the diversity of assessment instruments used, it was difficult to assess the similarity of participants across groups in relation to baseline severity of grief, anxiety or depression and other responses to bereavement. In two of the studies the intervention was delivered immediately or within days of the bereavement[33, 34] and in the remaining studies the mean time since bereavement ranged from 3 to 17 months. Where available, the range and standard deviations for length of time since bereavement indicated considerable variability within studies.

Figure 1: Process of study selection

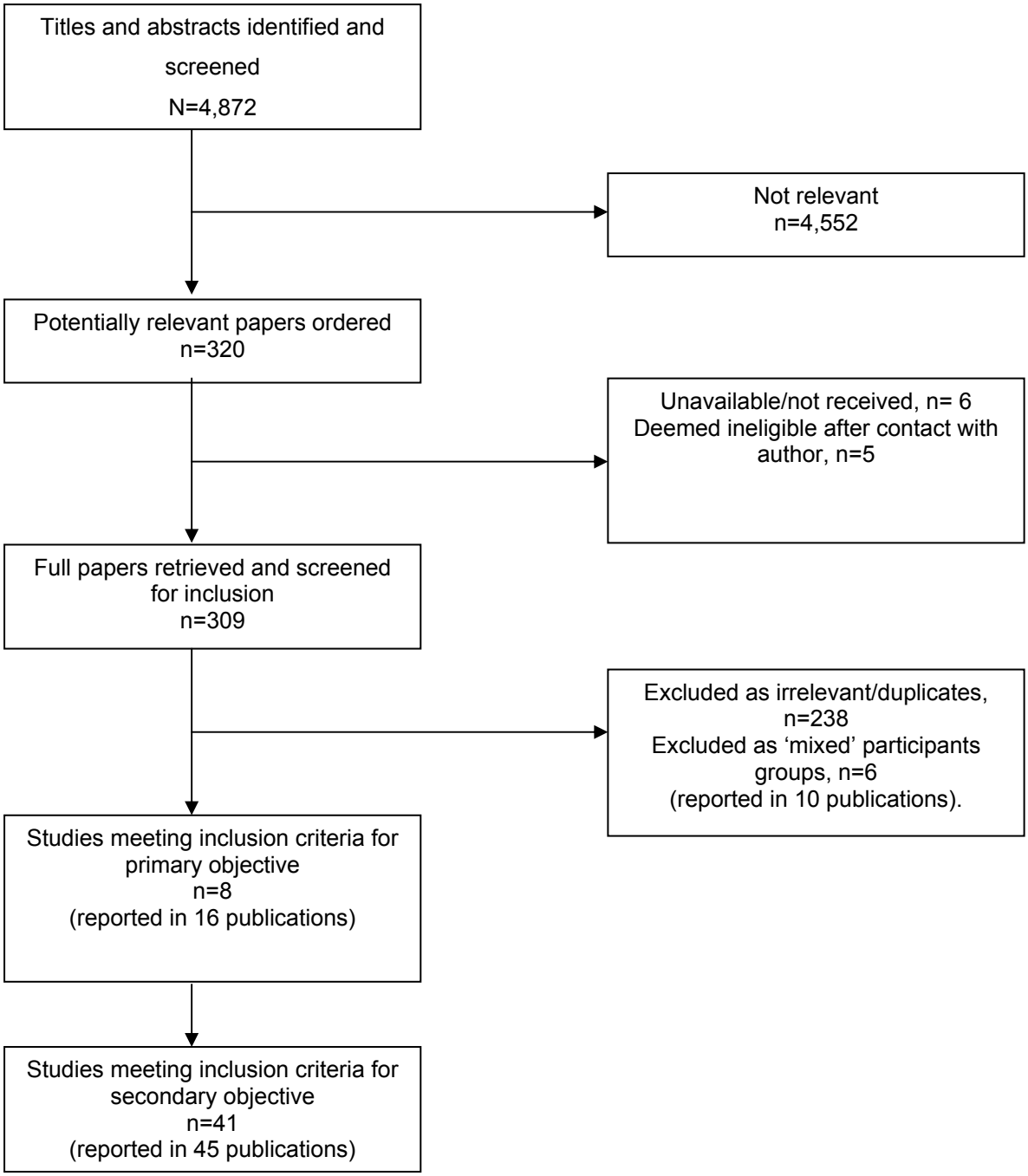

Table 1: Study characteristics

	Participants (number recruited, age, gender, ethnicity, relationship to deceased)	Time since bereavement Mean (SD), range	Intervention and comparison (duration and intensity)	Summary of results	Main threats to validity
Campbell[34]	**I:** n=50 Mean 41yrs (SD12yrs) 36% male, 96% Caucasian **C:** n=50 Mean 39yrs (SD 15yrs) 36% male, 99% Caucasian Mixed relationships	Immediate (intervention delivered at scene of suicide)	**I:** Active outreach to scene of suicide (duration & intensity unclear) **C:** No intervention	The intervention group sought treatment significantly quicker than the comparison group (statistically significant)	Non-randomised study using partly historical controls *Generalisability* Inadequate outcome measure
Constantino[35]	[a] **Total**: n=60 Range 24-70 years 17% male, 91% Caucasian Spouse	11mths (SD 9), range 1-27 mths	**I:** Bereavement group **C:** Social group (1.5 hr, weekly sessions, over 8 wks)	There was no statistically significant difference between groups on any of the assessment scales	This was a randomised study but the data for between group comparisons was not reported. The authors state there were no between group differences and combined the two groups to make before and after comparisons. Due to the lack of a no-intervention control group it is unclear whether the improvement in the two groups would have occurred anyway
De Groot[40]	**I:** n=74 (41 families) Mean 43yrs (SD13.7) 41% male, ethnicity not reported **C:** n=60 (33 families) Mean 43yrs (SD 13.5) 22% male, ethnicity not reported Spouse or first degree relatives	Intervention implemented 3 to 6 mths following suicide	**I:** Family based cognitive behaviour therapy (Four, two hour sessions) **C:** Usual care	There was no statistically significant difference between groups on the primary outcome measure Inventory of Traumatic Grief or on any of the secondary outcomes with the exception of perception of being to blame where the benefit was in favour of the intervention group	No substantial threats to validity. Randomised study. The method of allocation concealment was not ideal (a list was used) though an independent secretary administered the procedure
Farberow[38]	**I:** n=60 [b]Mean 40yrs (range 10-60+) 30% male, ethnicity not reported **C:** n=22 [b]Mean 37yrs (range 10-60+) 23% male, ethnicity not reported Mixed relationships	**I:** 10mths, range 3-48 mths **C:** 10mths, range 3-48mths	**I:** Bereavement group (1.5 hr, weekly sessions, over 8 wks) **C:** No intervention or dropped out after one session	There was improvement on eight emotions for the intervention group compared with one for the comparison group (statistical analysis not conducted)	Non-randomised study with high risk of selection bias. Groups not balanced at baseline
Kovac[36]	**I:** n=20 Mean 23yrs (SD 7yrs) 25% male, 90% Caucasian **C:** n=22 Mean 25yrs (SD 8yrs) 14% male, 91% Caucasian Relationship to deceased not stated	**I:** 13mths (SD 9mths) **C:** 12mths (SD 7mths)	**I:** Profound writing exercise **C:** Trivial writing exercise (15 minute, biweekly sessions, over 2 wks)	There was a significant improvement in grief associated with suicide for the intervention group compared to the control group (statistically significant) but not on any of the other measures used	Randomised study but not possible to assess adequacy of randomisation and allocation concealment. Groups not balanced at baseline *Generalisability* Participants were undergraduates who were rewarded with course credits for participation.

Pfeffer[37]	**I:** n=39 Mean 10yrs (SD 3) 41% male, 71% Caucasian **C:** n=36 Mean 11yrs (SD 4) 36% male, 67% Caucasian Mixed familial relationships (most of the children had lost a parent)	**I:** 10mths (SD 13 mths) **C:** 17mths (SD 34 mths)	**I:** Bereavement group - delivered separately but simultaneously to children and a parent (1.5hr, weekly sessions, over 10wks) **C:** No intervention	There was a greater reduction in anxiety and depression for children who received the intervention compared to those who did not (statistically significant) but not for social adjustment or post-traumatic stress or parental depression	Inadequate method of randomisation to groups leading to risk of selection bias. Groups not balanced at baseline. Extremely high loss to follow-up in the control group
Poijula[33]	**School A:** n=31 **School B:** n=32 **School C:** n=36 Mean 15yrs (SD 0.5) 52% male, ethnicity not reported Class mates of deceased (friends and non-friends)	Immediate intervention delivered 1 day to 1 week after suicide Outcome assessment was 4-9 mths following bereavement	**School A:** No intervention after first 2 suicides and intervention of first talk through (FTT) and psychological debriefing(PD) following third suicide **School B:** Inadequate intervention following first suicide and FTT and PD following second suicide **School C:** FTT and PD after first and only suicide	Significantly more of the pupils in School A were classified as having high intensity grief compared to the other schools (statistically significant)	Observational study using indistinct comparators. High risk of confounding
Seguin[39]	**Group A:** n=25 Mean 41yrs 16% male, ethnicity not reported **Group B:** n=13 Mean 42 yrs 17% male, ethnicity not reported **Group C**: n=15 Mean 40 yrs 27% male, ethnicity not reported **Group D:** n=16 Mean 42yrs 31% male, ethnicity not reported Mixed relationships	**Group A:** 10-11 mths, range 1-120 mths **Group B:** 5 mths, range 1-20 mths **Group C:** 6mths, range 1-16 mths **Group D:** 14 mths, range 3-71 mths	**Group A:** 2 mth duration bereavement group (8, weekly, 2.5hr sessions) **Group B:** 4 mth duration bereavement group (8, fortnightly, 2hr sessions) **Group C:** 6 mth duration bereavement group (11, fortnightly, 3hr sessions) **Group D:** 12 mth duration bereavement group (17, 2.5 hr sessions spread over the 12 mth period)	There was improvement in depression scores in the 4 groups over one year though it was unclear whether there were any between group differences (statistical analysis not conducted)	Observational study using indistinct comparators. The complexity of these interventions is such that one cannot be sure that the only difference is treatment duration. High risk of confounding

I: intervention group, C: control or comparison group
[a] Data not available separately for the two groups; [b] Estimates

There were three studies of adults only,[35, 36, 39] one of adults and adolescents over 15 years old,[40] one of children only,[33] and two studies that included a small number of children in their comparison group.[34, 38] One study included both adults and children and reported the outcomes separately for each group.[37] In most of the studies the majority of participants were women: the proportion of male participants ranged from 17% to 52% across studies. In the four studies where ethnic data were reported, participants were predominantly Caucasian.[34-37]

Data on other participant-related prognostic factors were not reported consistently across the studies. One study reported data on the educational level and income of participants, though this information was not reported separately for the two groups,[35] one reported educational level, whether participants were in paid employment, marital status and whether they had lived with the deceased[40] and another reported social class.[37] One study included self-report data on other major life changes since the suicide, further bereavement, and activities used to cope with loss, including psychotherapy and support from family and friends.[38] Another reported whether the suicide had been anticipated.[39] Very little information was available on the quality of participants' relationship to the deceased. One reported participants' closeness to the deceased and how upset they were at the death,[36] and two reported how long participants had had a relationship with the deceased.[39, 40] These data are available in Appendix D.

Apart from participants' relationship to the deceased, very little additional information was available about the deceased. Two studies reported no information about the deceased,[34, 38] four reported the method of suicide,[33, 35, 37, 39] though for both groups combined in two of these studies, and three reported the age of the deceased. [36, 39, 40]

Interventions

The settings in which the interventions were carried out were diverse. One study was delivered in a school setting;[33] one in the family home;[40] one at the scene of the suicide;[34] one in a laboratory at a university;[36] and two at a suicide prevention centre, though it was unclear whether this was a community or healthcare setting.[38, 39] The setting was not explicitly stated in two studies.[35, 37]

We classified one study as a self-help intervention, though researchers were closely involved in administering the intervention.[36] The intervention was delivered on a one-to-one basis. In the other studies the intervention was delivered in a family or group context by mental health professionals[33, 35, 37, 39, 40] or mental health professionals in conjunction with volunteers who had been bereaved by suicide.[34, 38]

The content of the interventions and comparators were diverse. Four studies compared an intervention to no intervention.[34, 37, 38, 40] One of these studies investigated the effectiveness of an outreach programme where a team provided comfort and advice to those bereaved by suicide at the scene of the suicide and as close to the time of death notification as possible compared with no intervention.[34] Three studies evaluated a group therapy intervention.[37, 38, 40] The remaining studies used an active comparator. One compared a bereavement group postvention (BGP) to a social group postvention (SGP);[35] one compared a profound writing condition (PWC) to a trivial writing condition (TWC);[36] one compared different responses by school authorities to student suicides in three schools[33] and one compared group interventions of different lengths.[39]

Three studies explicitly stated the theoretical underpinnings of the intervention. In one study[35] the intervention was described as being based on Yalom's 12 curative factors group psychotherapy and in another it was based on Bowlby's models of attachment, responses to loss and Lazarus and Folkman's cognitive coping.[37] The third study evaluated a cognitive behaviour therapy programme designed to address the problems of the complete family system rather than individual participants.[40] Two further studies provided some information about their underlying philosophy or background to the approach used: one described the group therapy as being based on a view of suicide "survivors" as normal people subjected to huge emotional stress rather than as people with psychiatric problems[38] and in one the intervention was based on Pennebaker's experimental writing paradigm.[36]

Outcomes

A range of outcomes were assessed across the studies, though most used standardised measures (Table 2). With the exception of the Beck Depression Inventory (BDI) and Impact of Event Scale (IES), which were common to three and two studies respectively, each of the studies used different outcome measures. Length of follow-up ranged from two to 13 months in the seven prospective studies.

Table 2: Outcome measurements used

	Campbell[34]	Constantino[35]	De Groot[40]	Farberow[38]	Kovac[36]	Pfeffer[37]	Poijula[33]	Seguin[39]
Beck Depression Inventory (BDI)		•				•		•
Brief Symptom Inventory (BSI)		•						
Centre for Epidemiologic Studies Depression Scale (CESDS)			•					
Childhood Posttraumatic Stress Reaction Index (CPSRI)						•		
Children's Depression Inventory (CDI)						•		
Grief Experience Inventory (GEI)		•						
Grief Experience Questionnaire (GEQ)					•			
Grief Recovery Questionnaire (GRQ)					•			
Hogan Sibling Inventory of Bereavement (HSIB)							•	
Intensity of emotion†				•				
Inventory of Traumatic Grief (ITG)			•					
Impact of Event Scale (IES)					•		•	
Maladaptive Grief (TRGR2L)			•					
Non-routine healthcare visits					•			
Perception of being to blame‡			•					
Revised Children's Manifest Anxiety Scale (RCMAS)						•		
Social Adjustment Scale (SAS)		•						
Social Adjustment Inventory for Children & Adolescents (SAICA)						•		
Suicidal ideation‡			•					
Traumatic Grief Evaluation of Response to Loss (TRGR2L)			•					
Tessier Scale of Grief								•
Treatment seeking*	•							

† Intensity of emotion rated as high, moderate or low

‡ See data extraction table (Appendix D) for details of how this was measured

*Length of time between intervention and seeking treatment

Methodological quality

Table 3 provides an overview of the methodological criteria met by individual studies and the quality assessment for individual studies is provided in Appendix C. The key threats to validity are noted in the description of individual studies (Table 1). With the exception of one study conducted in the Netherlands,[40] substantial methodological problems were identified in all of the studies. Of the four RCTs, two were truly random,[35, 40] one was not (participants were assigned in alternating order),[37] and one did not report how randomisation was carried out.[36] Of these four studies, one[40] reported an attempt to conceal treatment allocation and none used an intention-to-treat analysis, therefore there is a risk that the effectiveness of the interventions was overestimated. However, it is worth noting that in one study those who dropped out had slightly more favourable scores at baseline for depression, complicated grief and self-blame.[40]

The remaining studies used various methods to assign participants to the intervention and comparison group, all of which had a high risk of selection bias. In most of the studies the groups were not balanced at baseline[36-38] or it was unclear whether this was the case.[33, 35] Four studies did report data on potential prognostic or confounding variables separately for each group, however this was for a minimal number of variables, for example, age and gender[36-38] and time since bereavement and length of relationship with the deceased.[39] In addition, most of the studies were small and, with the exception of one[40] it was unclear whether they were appropriately powered to detect an effect on all the outcomes measured.

Apart from three studies with a one year follow-up,[35, 39, 40] participants were not followed for a period of time adequate to allow a meaningful assessment of the effectiveness of the interventions. It was possible to assess the fidelity of the intervention in one study which measured consistency of delivery.[37] Consistency of delivery was not assessed in the other studies. Four of the studies indicated explicitly or implicitly that the intervention was implemented based on a treatment protocol or manual.[35-37, 40]

Table 3 Quality of individual studies

	Campbell[34]	Constantino[35]	De Groot[40]	Farberow[38]	Kovac[36]	Pfeffer[37]	Poijula[33]	Seguin[39]
Was the assignment to treatment groups really random?		√	√					
Was the treatment allocation concealed?			√					
Was the assignment of participants to treatments described?	√	√	√	√		√		
Were the groups balanced at baseline in relation to potential confounders?	√							
Were baseline differences adequately adjusted for in the design or in the analysis?			√			√		
Were important confounders reported?			√	√	√	√		√
Was outcome assessment blind to group allocation?						√		
Were drop-out rates and reasons similar across intervention and control group?			√					
Were the data collection tools shown or known to be valid for the outcome		√[a]	√[a]		√[a]	√		√[a]
Were the data collection tools shown or known to be reliable for the outcome		√	√[a]		√[a]	√		√
Was the statistical analysis appropriate?			√		√	√		
Did the analyses include an intention to treat analysis?								
Was the consistency of the intervention measured?						√		
If yes, was the intervention provided to all participants in the same way?						√		
Was the length of follow-up long enough for the outcomes to occur?		√	√					√
Unlikely there was an unintended co-intervention?	√	√	√		√			
Unlikely that contamination may have influenced the results?	√	√	√		√		√	√

[a] For some measures

Grouping of studies

Because of the small number and diversity of the studies identified, they did not fall into natural groupings of similar interventions, participants, settings or outcomes. Studies were therefore grouped based on whether or not they had an active comparison group. However, due to the diversity within these groupings studies are described individually. Visual display of the treatment effects across studies using a common statistic (in this instance mean difference) can provide a useful summary of study results and aid interpretation. Unfortunately, due to the lack of appropriate data for the majority of studies it was not possible to do this.

The results of the studies are summarised below and also briefly in Table 1 in conjunction with a summary of the main threats to validity. Further details of the results of the individual studies are available in the data extraction tables (Appendix D).

Intervention compared to no intervention

All four studies comparing an intervention to no intervention reported a positive effect of the intervention on at least one outcome.

The most recent study carried out by de Groot et al.[40] in the Netherlands was also the best quality study identified. This was a cluster randomised trial of family-based cognitive behaviour therapy (CBT) compared to usual care and was targeted at spouses and first-degree relatives over 15 years of age. The intervention was delivered in the home of each participating family who received counselling from one of two experienced psychiatric nurses. There were four, 2 hour, planned sessions at two to three week intervals. The intervention was targeted at the complete family system rather than individual participants. The aim of the intervention was described as being to offer a reference frame for the grief reaction of participants, to engage emotional processing, enhance effective interaction and improve problem-solving. There were some fixed topics covered in the sessions, in particular cognitive restructuring and consolidation of support. There were also a range of optional topics that families could choose from depending on their needs. The sessions were supplemented by a manual: the contents included information on suicide, bereavement, homework, a bibliography and contact details for additional support.

This was the best quality study included in the review and there were no substantial threats to validity. There was an adequate method of randomisation and there was an attempt at allocation concealment; the method of allocation concealment was not ideal (a list was used) however an independent secretary administered the procedure. The sample size calculation took into account the cluster design as did the analysis. An appropriate method was used to adjust for baseline differences and loss to follow-up was low. Thirteen months after bereavement, there was no beneficial effect on the primary outcome of self reported complicated grief (measured by the Inventory of Traumatic Grief) in the intervention group compared to control (adjusted mean difference -0.61, 95% CI: -6.05, 4.83, p=0.82). There was also no statistically significant difference between intervention and control on the secondary outcome measures of the CESDS, and suicidal ideation (see Appendix D). The intervention group was less likely to have a perception of being to blame for the suicide than the control group (adjusted OR 0.18, (95% CI: 0.05, 0.67, p=0.01) and fewer maladaptive grief reactions (TRGR2L), though the latter was at the margins of statistical significance (adjusted OR 0.39, (95% CI: 0.15, 1.01, p=0.056). Based on the unadjusted analysis none of the outcomes were statistically significant.

Pfeffer et al.[37] conducted a study targeted primarily at bereaved children, most of whom had lost a parent. The intervention was delivered in 10 weekly sessions of 1.5 hours by psychologists to groups of children from 2-5 families. Eligible families were identified from the medical examiners' lists of suicide victims and then contacted by researchers. Children were grouped by age (6-9 years, 10-12 years and 13-15 years) and siblings were generally in the same group. The intervention had psycho-educational components, such as discussion of the concept of death and why people take their own life, and supportive components such as facilitating children's expressions of grief. The intervention was offered separately but simultaneously to parents. Children were allocated alternately to receive the intervention or no intervention. Children in the latter group were free to seek formal support elsewhere and 20% did so.

After three months there was a statistically significant, greater improvement in anxiety (RCMAS) and depression (CDI) for children who received the intervention compared to those who did not: anxiety was higher at follow-up than baseline and depression remained the same for children who did not receive the intervention. There was no statistically significant difference between groups in parental depression (BDI) or in children's social adjustment (SAICA) or posttraumatic stress (CPSRI). However, this was a small study and it was unclear whether it was appropriately powered to detect an effect on these measures.

This study benefited from the use of outcome measures that were completed through semi-structured interviews conducted by psychologists trained for the purpose, who were blind to group allocation. However, a number of factors weaken the validity of the findings of this study. The method of allocation of participants to group was susceptible to selection bias: children were generally allocated alternately, but sometimes consecutively to ensure that at least two families were available to receive the intervention. The groups were not balanced at baseline: children in the control group were significantly older and had poorer social adjustment than children in the intervention group. The length of time since bereavement also seemed longer in the control group (17.2 months (SD 33.6)) than the intervention group (10.2 months (SD 12.5)). Although analysis of covariance (ANCOVA) was used to take into account baseline assessment scores, age and length of time between baseline and follow-up assessment, this was likely to have been an inappropriate analysis given that there were less than 10 individuals from the control group included in the analysis. Seventy-five percent of control participants were lost to follow-up compared with 18% in the intervention group and the analysis was based only on those participants who completed the study.

The study by Farberow et al.[38] was targeted at adults. They assessed an eight week group therapy intervention delivered by a mental health professional and a person bereaved by suicide who had already gone through the programme and received additional training. The intervention was based on the underlying philosophy that suicide survivors are normal people subject to huge emotional stress who need help in working through their grief. The comparison group was made up of individuals who had completed a pre-programme assessment as well as a follow-up questionnaire but who did not attend the sessions or dropped out after one session. The groups were different at baseline in terms of kinship to the deceased, their health since the suicide and general feelings: the intervention group reported greater feelings of grief, shame and guilt than the comparison group and this was statistically significant. Outcome was assessed by asking participants to rate a range of emotions as low, moderate or high. A statistical analysis was not reported for differences between groups.

The authors state that the intervention group experienced significant improvement in eight of the nine emotions assessed (anger towards deceased, anger towards self, anxiety, depression, grief, guilt, puzzlement, shame) after two months. There was improvement in the comparison group on one of the nine emotions. However, this seemed to be based on change within groups over time and a statistical analysis was not reported.

As with the previous study, a number of factors weaken the validity of the findings. As noted, the reliability and validity of the outcome measure is unclear and conclusions about significant change do not appear to be based on a statistical analysis. In addition, the comparisons appear to be within group over time and not between groups. The method of allocation to groups introduces the possibility of selection bias. Given the baseline differences between the two groups, it seems that individuals with higher levels of distress were more likely to take part in the intervention. Therefore, this group was probably more likely to show improvement than the control group, particularly over the short time-scale involved. Participants included in the study appeared to be only those who completed the programme and completed the before and after questionnaires. It is unclear how representative these individuals are of all those who received treatment at the centre.

The fourth study, conducted by Campbell[34] was of individuals attending a crisis centre for assessment and treatment. This study reported a statistically significant, shorter length of time lapse between bereavement and attending the centre for those had received an active outreach intervention at the time of the suicide compared to those who had not. The intervention was delivered by mental health workers and volunteers, who had themselves been bereaved by suicide, following notification from the local coroner. The team attended the scene of the suicide as close to the time of death notification as possible with the aim of providing comfort and advice to the bereaved. The key limitation of this study is the inadequacy of the outcome measure to assess the effectiveness of the

intervention. The outcome measure is based on the assumption that seeking help following the intervention is a positive outcome. In the absence of any information about individuals who received the outreach intervention but did not seek assessment at the crisis centre it is unclear whether this was an appropriate assumption. Additionally, the comparison group was made up of a mixture of historical and geographical controls.

Studies using an active comparator

The findings from the studies comparing two or more active interventions were mixed. A study evaluating writing therapy amongst undergraduates who had been bereaved by suicide in the previous two years reported positive findings.[36] This study, by Kovac et al. compared a profound writing condition (PWC) to a trivial writing condition (TWC). Participants were recruited based on a moderate to high level of closeness to the deceased and moderate to high level of upset by the bereavement (based on five-point likert scales). Participants receiving the PWC spent four sessions of 15 minutes over two weeks in a laboratory room, where they were instructed to write about events and emotions around their loss, especially issues they had not widely discussed with others. Individuals assigned to the TWC were instructed to write an objective and precise description of their bedroom and their activities that day and avoid mentioning emotions and feelings. After two months there were statistically significant differences between groups on the GEQ total score (described as assessing grief specific to bereavement by suicide), but not on any of the other measures (GRQ and IES). There was an improvement over time in both groups on the GEQ but the profound writing group had less severe grief at 2 months, though they also had less severe grief at baseline. Although there were no between group differences, there was also improvement over time in both groups as assessed by the IES and GRQ, non-routine healthcare visits and one subscale (unique grief) of the GEQ. As only a total of 30 participants were included in the analysis it is possible that this study was underpowered. The two groups were not balanced at baseline; the PWC group reported a closer relationship to the deceased and a lower score on the GEQ. The potential for generalisability is a key limitation of this study. The participants were college students who were given extra course credits for participation; therefore the extent of dropout is probably less than would be expected in a real-life setting. It is unclear how applicable the findings of this study would be to different populations of people bereaved by suicide.

Interpretation of the study by Poijula et al., based in a school setting, is difficult as the interventions in the three schools where student suicides had occurred were very similar and there were a different number of suicides in each of the schools, which may have had a confounding effect (school A had three suicides, school B had two and school C had one).[33] School A had no contingency plan in place to deal with student suicide: following two suicides there was no crisis intervention but following a third suicide there was an ‘adequate’ crisis intervention comprising a first talk through (FTT) and psychological debriefing (PD). School B had a contingency plan but it was not fully implemented until after the second suicide in the school. School C had no contingency plan but an ‘adequate’ intervention following the single suicide. The proportion of students with high intensity grief, based on scores from the HSIB, 4 to 9 months following the interventions, was 25% for school A, 5% for school B and 0% for school C and the difference was statistically significant. A comparison was also made between those who received an intervention and those who did not: there was no statistically significant difference between the two groups in the proportion of participants who were classified as being at high and low risk for intense grief. Given that all of the schools had an intervention at some stage it is unclear what is being compared here. There was no statistically significant difference between schools when the IES was used to classify risk for post-traumatic stress disorder (PTSD).

The remaining two studies are similar in that they included only adults and followed up participants for 12 months. However, only one reported a statistical analysis. Constantino et al. state that there was no statistically significant difference in outcomes 12 months after a bereavement group intervention compared to a social group intervention for women who had been bereaved through the suicide of their spouse.[35] However, this was a small study and may not have been appropriately powered to detect an effect. Participants were recruited by a variety of means including professional referral and self referral following advertisement in local media. The bereavement group intervention, conducted in groups of 4-6 participants in weekly, 1.5 hour sessions over 2 months, aimed to promote adaptive coping strategies and enhance remodelling of relationships. The authors state that a psychotherapy model was used. The groups were conducted by one of two leaders who had minimum of a Master’s

degree in mental health nursing and received a 16 hour training programme specifically related to the intervention. There were also weekly one hour supervisory meetings and notes were taken of individual sessions though details of the consistency of implementation are not reported. The social group intervention was also led by two professionals with similar qualifications to the individuals running the bereavement group, who also received an equivalent training programme. Socialisation groups were a similar size to the other group and the duration and frequency of the intervention was also the same. Members of the group were encouraged to plan weekly activities with the aim of promoting socialisation, recreation and leisure.

The authors reported that there were no statistically significant differences between the two groups at baseline or at any of the follow-up points, though the data were not reported. The two groups were then combined to investigate change over time. Although this data was extracted, it is emphasised that this is before and after data and studies reporting only before and after data have been excluded from the review. There was statistically significant improvement in the combined group on the majority of the scales and subscales used (BDI, GEI, BSI and SAS) and the significant changes were mainly from baseline to two month follow-up. The study was an RCT with a 12 month follow-up. The participants were reported as being similar at baseline on the assessment measures though it was unclear whether this referred to all participants at baseline or only those who completed the study and were included in the analysis. As highlighted by the authors of this study, due to the lack of a no intervention control group it is not possible to conclude that any improvement was due to the intervention rather natural improvements that would have taken place over time anyway.

In the final study, Seguin et al. compared four, health professional-led, closed group interventions of two, four, six and 12 months duration that were offered to the bereaved on a self-referral basis in four different areas of Canada.[39] The authors state that although not identical, the interventions were generally the same except for the length of treatment. The number of sessions ranged from eight for the two month group to 17 for the 12 month group (see Table 1). A statistical analysis was not conducted. From the data reported, there was a trend in all four groups towards decreasing depression over the 12 month follow-up period. There was some variation between groups in the decrease in BDI score (least reduction in the two month group and greatest in the four month group). However, this cannot be attributed to the duration of the intervention due to the considerable and unequal loss to follow-up across groups (ranging from 52% retained in the two month group to 7% retained in the six month group at 12 months), the possibility of differences in the content and delivery of the interventions at the different centres, and what appear to be baseline differences between the groups. The authors state that grief scores remained stable though this is not clear from the tables reported

Summary

We found eight studies with a control or comparison group that met the inclusion criteria for the primary objective of the review. The participants, interventions, outcomes and outcome measures were diverse across the studies. There was some evidence of effective interventions. Firstly, a bereavement group intervention for children led by psychologists was more effective at reducing anxiety and depression, but not social adjustment and post traumatic stress, than no intervention. Secondly, a group intervention for adults delivered by a health professional and a volunteer was more effective than no intervention in terms of scores for eight of the nine emotions assessed. Thirdly, an active outreach intervention led to a shorter time taken to seek help at a crisis centre than no intervention. Fourthly, in a school setting, implementation of a crisis intervention involving FTT and PD close to the time of suicide may lead to lower levels of high intensity grief, but not stress response, than a less intense crisis intervention. Finally, a family-based CBT programme was more effective at reducing maladaptive grief reactions and perception of being to blame for the suicide, but not complicated grief reaction, suicidal ideation or depression.

There were also studies where no statistically significant differences were detected between the intervention and comparison, though these studies may have been too small to detect an effect. Thus a bereavement group intervention was not more effective than a social group intervention provided for widows. The effectiveness of a group intervention did not seem to vary with different treatment durations. Amongst undergraduates, a profound writing intervention had marginal benefits compared to a trivial writing condition, at reducing grief as measured by the GEQ overall score but not on its subscales and not on the other measures of grief and stress.

However, robust conclusions about the effectiveness or ineffectiveness of these interventions cannot be reached due to either considerable methodological limitations across the studies or, in the case of one methodologically sound study due to the lack of a beneficial effect on the primary outcome. The nature of the limitations, means that it is difficult to assess with any certainty whether the effect of the intervention was overestimated or underestimated in individual studies. It was not possible to identify any common characteristics between those studies that found some evidence of an effect and those that did not. Of the adult studies using standardised outcome measures, there was evidence of improvement only on the grief or bereavement measures. There was no improvement on any of the psychological measures such as the BDI and the IES (though this was not entirely clear in one study due to lack of statistical analysis[39]), or the BSI and SAS. However, given the small number of studies it is not appropriate to draw strong conclusions from this.

Due to the paucity of data it was not possible to explore whether the effects of interventions varied with factors such as age and gender of the bereaved, whether or not the intervention was received on the basis of self-referral, characteristics of the deceased and the nature of the relationship between the bereaved and the deceased.

Aim 2: Publications describing an intervention

A secondary aim of the review was to provide a descriptive overview of interventions for people bereaved by suicide that have been reported in the literature. These could be either evaluated interventions using a non-controlled design (and therefore did not meet the inclusion criteria for the primary aim) or descriptions of interventions without any evaluation. These criteria were quite difficult to apply. There were occasions where the inclusion of papers as descriptive studies was resolved by discussion, and some of the studies included may be considered as 'borderline' descriptive studies. At times it was unclear whether an actual planned intervention was being described, whether an already implemented intervention was being described or whether the paper contained a general discussion of the components an effective intervention should include. Our aim was to focus on descriptions of actual planned or implemented interventions to provide an overview of the types of interventions being used, that might be available for evaluation, rather than theoretical descriptions. When considering the interventions described it must be remembered that these are simply the interventions that we identified in the literature and they may not reflect the full range of support available to people bereaved by suicide.

A total of 41 studies (45 papers) were identified that described an intervention. These are summarised in Table 4 and further details are available in Appendix E. Five papers required translation to extract the relevant information.[63, 66, 71, 78, 84] Seven of the studies (from eight papers) evaluated the effectiveness of an intervention.[61, 84-89, 93] These were before and after studies, surveys or observational studies, and thus did not meet the inclusion criteria for the main review. Five of these studies were conducted in the USA or Canada and the remaining two were conducted in Norway and Australia. The study from Norway was a survey of the special support services available across the country and did not evaluate an individual intervention. The interventions evaluated were diverse, though support groups were most common. Mental health professionals, health professionals and volunteers, some of whom had been bereaved by suicide, were involved in delivering the interventions.

The remaining 37 papers described 34 interventions but did not report an evaluation. The majority were implemented in the USA (56%), and the remaining papers were from Canada, Norway, Switzerland, Germany, Ireland, Israel and Australia. Where the setting was not clearly stated, most of the interventions appeared to be community based. Where the setting was reported, the interventions were most commonly in a school setting. Outside the school setting, most of the interventions provided counselling or support in a group setting. The majority of interventions were delivered to groups of bereaved individuals (56%). There were a small number that appeared to be targeted at individual families or used group support in addition to individual counselling/therapy. The interventions that were grouped into the 'other' category were mainly school based interventions that provided support in numerous ways, on a short-term basis, such as: provision of information at school assemblies or in the classroom; group discussions and follow-up for individuals who were considered vulnerable. The interventions were targeted at peers (35%), family members (27%), children (6%) or any person bereaved by suicide (26%). Only two papers were identified where the intervention was targeted at people who had a professional relationship with the deceased. Generally, mental health

professionals, health professionals or counsellors delivered the interventions (62%). The intervention was delivered by 'survivors' after suicide in six studies (18%), some of whom were also healthcare professionals.

Table 4: Characteristics of papers that described an intervention

	Evaluative studies	Descriptive studies
Country		
USA	3	19
Canada	2	6
Australia	1	1
Norway	1	0
Switzerland	0	1
Israel	0	1
Ireland	0	1
Germany	0	1
Unclear	0	4
Setting		
School	1	7
University	0	2
Community	5	6
Community and School	0	4
Other	0	3
Unclear	1	12
Participants		
Peers	2	12
Family	2	9
Any bereaved person	3	9
Children	0	2
Professional	0	2
Unclear	0	0
Intervention delivered by		
Health professional, mental health professional, social worker, counsellor	2	21
Suicide 'survivor'	2	6
Other	2	4
Unclear	1	3
Intervention		
Group support/therapy	3	19
Mixed group and individual therapy	3	0
Individual families	0	3
Other	1	10
Unclear	0	2

DISCUSSION

The evidence-base

The aim of this systematic review was to evaluate the effects of interventions aimed at supporting persons bereaved by suicide. Studies were included regardless of type of intervention, participants (provided they had been bereaved through suicide), setting or outcomes assessed. The key restriction applied was that studies had to have a control or comparison group, which was viewed as particularly important due to the changing nature of grief over time.[11] Despite extensive searches and no language restrictions we identified very few relevant studies. Although we identified many papers that described an intervention, we identified only eight controlled studies; six studies of adults and two of children. Four of these were RCTs, though only two reported an adequate method of randomisation. Apart from three one-year studies, length of follow-up was probably not long enough to allow a meaningful evaluation of the effectiveness of the interventions. Even the studies with one year follow-up are arguably too short. Overall the studies do not provide a robust evidence-base on which to reach firm conclusions about the effectiveness of interventions for people bereaved by suicide.

The main common characteristic of the studies identified was the evaluation of group interventions of eight to 10 weeks duration. The average length of time since bereavement in these studies tended to be about one year though there was a fairly wide range within studies. The majority of participants were female and Caucasian. No study was identified that had evaluated an intervention where a professional relationship to the deceased had existed. Overall the studies were diverse in terms of: the content of the interventions; the setting; outcomes and outcome measures. This reflects the findings of a systematic review of bereavement care interventions for general population groups.[103] Although a much larger body of evidence was identified in this review, it was described as having excessive theoretical heterogeneity, stultifying study heterogeneity, inadequate reporting of intervention procedures and few replication studies. Methodological flaws in study design were also identified as an area of concern.[103]

Similarly, the studies in the current review had a number of methodological limitations. The most significant issue was the risk of selection bias, either through self-selection or selection by the investigators due to non-randomised methods of allocation. The circumstances in which, and the extent to which, non-randomised studies are susceptible to bias is not fully understood, though an important determinant may be the extent to which prognosis influences selection for a particular treatment as well as outcome.[31] Due to non-randomised methods of group allocation, four of the studies were at risk of having systematic differences between the comparison groups, possibly leading to different responses to the intervention. There was evidence in two of these studies, plus an additional study with an unclear method of randomisation, that the comparison groups were not balanced at baseline. The included studies reported a very limited range of potential prognostic factors, which means there may be other important sources of imbalance that remain unknown.

A number of other methodological limitations were identified. The studies were generally small and may have been underpowered, especially given the possibility of clustering where more than one person delivered the intervention or where the intervention group consisted of a number of small therapeutic groups.[104] The fidelity of interventions (i.e. the extent to which the intervention was implemented as planned) was generally not assessed in the studies, nor was any relevant information presented. The quality of administration of interventions has been identified as an important aspect of study quality;[105] however, this potentially important source of study heterogeneity could not be investigated due to lack of data. In general, studies used standardised outcome measures, though there was some use of measures of unknown reliability and validity. In addition, two of the studies relied on before and after comparisons and did not directly compare groups, thereby rendering the evaluation to that of a before-after design. Given that before and after studies were excluded from this review due to their methodological limitations, the findings of these studies must be treated with caution.

Six of the eight studies showed evidence of benefit from participants receiving the experimental intervention rather than the comparator on at least one measure. However, due to the differences between studies and the methodological limitations of the studies, care needs to be taken against the assumption that some kind of intervention is better than none. While some of the methodological

limitations, such as small sample size or the control group receiving support from elsewhere, could be leading to a masking or underestimation of the effects of the interventions, other limitations may have led to an overestimation of the effect. Weak evidence of an effect has also been found in relation to interventions for general bereaved populations.[9, 103, 106] Suggested reasons for this included the methodological flaws of the studies,[9, 103] masking of effects due to no control for gender in the design and statistical analysis,[9] and use of researcher-recruited participants rather than self-selected participants.[106]

There was one well-designed, randomised study from the Netherlands without any significant sources of potential bias.[40] Despite some positive findings from this study in favour of the intervention, uncertainty remains, as there was no evidence of benefit found in relation to the primary outcome of self-reported complicated grief. This early stage intervention has the advantage of being brief, however, replication and evidence of stronger effect would increase confidence in the effectiveness of such an intervention.

It was not possible in the current review to explore whether the effects of interventions varied with factors such as age and gender of the bereaved, whether or not the intervention was received on the basis of self-referral, characteristics of the deceased and the nature of the relationship between the bereaved and the deceased. It has been suggested that an important factor in whether or not bereaved individuals benefit from an intervention may depend on whether or not they are experiencing complicated grief.[107] However, from the data available it was not possible to explore this issue.

Implications for practice and research

The evidence we have identified, appraised and synthesised is not robust enough to provide clear implications for practice. However, based on the limited evidence available, the following tentative suggestions are made: a psychologist-led group therapy intervention for children, most of whom had lost a parent, was found to reduce anxiety and depression but not social adjustment and post traumatic stress when compared to no intervention;[37] and a combined health professional and volunteer led group therapy intervention for adults who had mainly lost a family member was found to improve anger towards the deceased, anger towards self, anxiety, depression, grief, guilt, puzzlement and shame. [38] There is also recent evidence that a brief CBT family intervention with a trained psychiatric nurse resulted in fewer maladaptive grief reactions and less self-blame but there was no benefit found on complicated grief, depression or suicidal ideation.

This is an under-researched area and there is a pressing need for methodologically sound RCTs to evaluate the effectiveness of interventions aimed at supporting people who have been bereaved by suicide. While this is a challenging study design to implement in this field, the recently published RCT of family-based CBT illustrates that it is feasible. Some specific issues to consider are:

- Studies need to be large enough to detect an effect, where one exists. When the inclusion criteria of studies are likely to lead to a heterogeneous sample, sample size calculations should take into account the need for analysis investigating the impact of key potential prognostic factors such as gender and length of time since loss.

- Group therapeutic interventions can be defined as complex and this needs to be given consideration when designing studies and especially in relation to defining the intervention. Complex interventions have been described as interventions that have several components which may act independently or interdependently resulting in difficulties in defining, developing, documenting and reproducing the intervention.[108, 109] A framework for the evaluation of complex interventions has emphasised the importance of preliminary work, using qualitative or quantitative methods, prior to the main trial. The framework recommends identification of the probable active components of the intervention and the underlying mechanisms to identify the optimum intervention followed by an exploratory study to investigate acceptability and feasibility of the intervention as well as defining the most appropriate comparator.[108, 109] In addition, using process evaluation embedded within an RCT of complex interventions can help to distinguish interventions that have failed from interventions that were poorly implemented.[110-112]

- Currently it is difficult to make meaningful comparisons between studies because of their diversity in outcomes and outcome measures. It would help development of the evidence-base in this field if a core set of outcome measures could be used across all future studies. This would involve consideration of the reliability and validity of individual measures; whether to use generic scales of anxiety and depression and/or specific measures of grief;[113] and whether there are aspects of grief specific to bereavement by suicide that need to be measured.

- Given that grief related to bereavement can be culture-specific, consideration should be given to likely generalisability to different ethnic groups. Research is required on the effectiveness of interventions in different ethnic groups. The potentially different responses of males and females, people of different ages and social backgrounds, as well as those experiencing complicated grief also needs investigation.

- The field would benefit from better reporting of studies through adherence to the guideline provided in Consolidated Standards of Reporting Trials (CONSORT) statement[114] and, where relevant, the Transparent Reporting of Evaluations with Non-randomised Designs (TREND) statement.[115]

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APPENDIX A: SEARCH STRATEGIES

Guidelines

National Guideline Clearinghouse
Searched at http://www.ahcpr.gov/clinic/assess.htm
Update search: 28/10/05
The search strategy by King et al 2004[29] was rerun and retrieved 39 records.
Postvention search: 01/12/05
A free text search for 'postvention*' retrieved one record.

National Institute for Health and Clinical Excellence (NICE) (published appraisals)
Searched at http://www.nice.org.uk/nice-web/
Update search: 31/10/05
The search strategy by King et al 2004[29] was rerun and retrieved 3 records.
Postvention search: 01/12/05
A free text search for 'postvention*' retrieved no records.

Scottish Intercollegiate Guidelines Network (SIGN)
Searched at http://www.sign.ac.uk/
Update search: 31/10/05
The search strategy by King et al 2004[29] was rerun and retrieved 6 records.
Postvention search: 01/12/05
A free text search for 'postvention*' retrieved 6 records.

Summaries of the evidence

Clinical Evidence: A compendium of the best available evidence for effective health care. London: BMJ Publishing Group.
Update search: Issue 12, 2004
No relevant chapters were identified.

Health Evidence Bulletins of Wales
Searched at http://hebw.uwcm.ac.uk/
Update search: 24/10/05
The search strategy by King et al 2004[29] was rerun and retrieved no records.
Postvention search: 01/12/05
A free text search for the term 'postvention*' retrieved no records.

Health Services Technology Assessment Text (HSTAT)
Searched at http://text.nlm.nih.gov/
Update search: 24/10/05
The search strategy by King et al 2004[29] was rerun and retrieved 101 records.
Postvention search: 01/12/05
A free text search for the term 'postvention*' retrieved 3 records.

National Coordinating Centre for Health Technology Assessment
Searched at http://www.hta.nhsweb.nhs.uk
Update search: 28/10/05
The search strategy by King et al 2004[29] was rerun and retrieved 3 records.
Postvention search: 01/12/05
A free text search for the term 'postvention*' retrieved no records.

Turning Research Into Practice (TRIP) Index
Searched at http://www.ceres.uwcm.ac.uk/framset.cfm?section=trip
Update search: 31/10/05
The search strategy by King et al 2004[29] was rerun and retrieved 13 records.
Postvention search: 01/12/05
A free text search for the term 'postvention*' retrieved no records.

Databases of systematic reviews

C2 Reviews of Interventions, and Policy Evaluations (C2-RIPE)
Searched at http://www.campbellcollaboration.org/index.html
Update search: 20/10/05
The search strategy by King et al 2004[29] was rerun and retrieved no records.
Postvention search: 01/12/05
A free text search for the term 'postvention*' retrieved no records.

Cochrane Database of Systematic Reviews (CDSR)
Searched on CD-ROM
Update search: 18/10/05 (2005: Issue 3)
The search strategy by King et al 2004[29] was rerun and retrieved 121 records.
Postvention search 29/11/05 (2005: Issue 3)
A free text search for 'postvention*' retrieved no records.

Database of Abstracts of Reviews of Effects (DARE)
Searched at http://www.york.ac.uk/inst/crd/crddatabases.htm
Update search: 24/10/05
The search strategy by King et al 2004[29] was rerun and retrieved 8 records.
Postvention search: 01/12/05
A free text search for the term 'postvention*' retrieved no records.

Databases of controlled trials

C2 Social, Psychological, Education, and Criminological Trials Registry (C2-SPECTR)
Searched at http://www.campbellcollaboration.org/index.html:
Update search: 20/10/05
The search strategy by King et al 2004[29] was rerun and retrieved 24 records.
Postvention search: 01/12/05
A free text search for the term 'postvention*' retrieved no records.

CENTRAL
Searched on CD-ROM
Update search: 18/10/05 (2005: Issue 3)
The search strategies by King et al 2004[29] were rerun limited to 2004 onwards. This retrieved 2 records.
Postvention search 29/11/05 (2005: Issue 3)
A free text search for the term 'postvention*' retrieved 2 records.

Specialist databases for psychiatry

Mental Health Abstracts
No update search was carried out as this database closed in 2000 and has subsequently been removed from Dialog.

PsycINFO
Searched on OvidWeb: http://gateway1.uk.ovid.com/ovidweb.cgi
Update search: 14/10/05 (2000 – September Week 4)
The search strategies by King et al 2004[29] were rerun limited to 2004 onwards. This retrieved 178 records.
Postvention search 28/11/05 (2000 – November Week 2 2005)
A search for 'postvention$.ti,ab' retrieved 19 records.
Update search: 30/09/07 (October Week 1 2007). This retrieved 165 records.

Health related databases

AMED (Allied and Complementary Medicine)
Searched on OvidWeb: http://gateway1.uk.ovid.com/ovidweb.cgi
Update search: 14/10/05 (1985 – October 2005)
The search strategies by King et al 2004[29] were rerun limited to records entered from 2004 onwards. This retrieved 5 records.
Postvention search 29/11/05 (1985 - November 2005)

A search for 'postvention$.ti,ab' retrieved one record.

British Nursing Index (BNI)

Searched on OvidWeb: http://gateway1.uk.ovid.com/ovidweb.cgi
Update search: 14/10/05 (1985 – September 2005)
The search strategies by King et al 2004[29] were rerun limited to 2004 onwards. This retrieved 4 records.
Postvention search 29/11/05 (1985 - November 2005)
A search for 'postvention$.ti,ab' did not retrieve any records.
Update search 30/09/07. This retrieved 29 records.

CINAHL

Searched on OvidWeb: http://gateway1.uk.ovid.com/ovidweb.cgi
Update search: 14/10/05 (1982 – October Week 1 2005)
The search strategies by King et al 2004[29] were rerun limited to 2004 onwards. This retrieved 52 records.
Postvention search 28/11/05 (1982 – November Week 3 2005)
A search for 'postvention$.ti,ab' retrieved 7 records.
Update search 30/09/07 (September Week 4 2007). This retrieved 58 records.

EMBASE

Searched on OvidWeb: http://gateway1.uk.ovid.com/ovidweb.cgi
Update search: 14/10/05 (1996 – 2005 Week 41)
The search strategies by King et al 2004[29] were rerun limited to 2004 onwards. This retrieved 78 records.
Postvention search 29/11/05 (1980 – Week 47 2005)
A search for 'postvention$.ti,ab' retrieved 18 records.
Update search 30/09/07 (Week 39 2007). This retrieved 113 records.

Health Management Information Consortium (HMIC)

Searched on OvidWeb: http://gateway1.uk.ovid.com/ovidweb.cgi
Update search: 14/10/05 (September 2005)
The search strategies by King et al 2004[29] were rerun limited to 2004 onwards. This retrieved 13 records.
Postvention search 29/11/05 (November 2005)
A search for 'postvention$.ti,ab' retrieved one record.
Update 30/09/07. This retrieved 7 records.

LILACS (Literatura Latino-Americana e do Caribe em Ciências da Saúde) Searched: at http://bases.bireme.br/
Update search: 25/10/05 (1982 – 2005)
The search strategies by King et al 2004[29] were rerun and retrieved 69 records.
Postvention search: 29/11/05 (1982 –2005)
A free text search for 'postvention$' retrieved no records.

MEDLINE

Searched on OvidWeb: http://gateway1.uk.ovid.com/ovidweb.cgi
Update search: 14/10/05 (1996 – October Week 1 2005)
The search strategies by King et al 2004[29] were rerun limited to 2004 onwards. This retrieved 106 records.
Postvention search 29/11/05 (1966 – November Week 3 2005)
A search for 'postvention$.ti,ab' retrieved 24 records.
Update 30/09/07 (September Week 4 2007). This retrieved 87 records.

MEDLINE In-process & other non-indexed citations

Searched on OvidWeb: http://gateway1.uk.ovid.com/ovidweb.cgi
Update search: 14/10/05 (October 13, 2005)
The search strategies by King et al 2004[29] were rerun and retrieved 11 records.
Postvention search 29/11/05 (28 November 2005)
A search for 'postvention$.ti,ab' retrieved no records.
Update 30/09/07 (3rd October 2007). This retrieved 13 records.

Social care databases

Applied Social Sciences Index and Abstracts (ASSIA)

Searched via CSA Illumina http://ca2.csa.com/

Searched: 28/11/05 (1987 - 2005)

No date restrictions were applied and the following search strategy retrieved 150 records;

1. suicide (ASSIA thesaurus term)
2. suicide
3. suicidal
4. self killing
5. killing oneself
6. kill oneself
7. take ones life
8. take ones own life
9. taking ones own life
10. taking ones life
11. #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10
12. bereavement/(ASSIA thesaurus term - exploded)
13. bereave*
14. grief
15. grieving
16. mourning
17. impact* within 2 (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor*)
18. impact* within 2 (grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)
19. consequence* within 2 (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor*)
20. consequence* within 2 (grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)
21. affect within 2 (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour*)
22. affect within 2 (neighbor* or grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)
23. affects within 2 (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor*)
24. affects within 2 (grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)
25. affected within 2 (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor*)
26. affected within 2 (grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)
27. effect within 2 (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor*)
28. effect within 2 (grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)
29. effects within 2 (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour*)
30. effects within 2 (neighbor* or grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)
31. suicide within 2 survivor*
32. surviving within 2 suicide
33. #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21 or #22 or #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30
34. #11 and #33
35. #31 or #32 or #34
36. reaction* within 3 (resident* or nurs* or carer* or care giver* or caregiver* or assistant* or professional* or midwife or midwives or health visitor*)
37. reaction* within 3 (pam or pams or clinician* or counsellor* or counselor* or consultant*)
38. response* within 3 (resident* or nurs* or carer* or care giver* or caregiver* or assistant* or professional* or midwife or midwives or health visitor*)

39. response* within 3 (pam or pams or clinician* or counsellor* or counselor* or consultant*)
40. impact* within 3 (resident* or nurs* or carer* or care giver* or caregiver* or assistant* or professional* or midwife or midwives or health visitor*)
41. impact* within 3 (pam or pams or clinician* or counsellor* or counselor* or consultant*)
42. reaction* within 3 (therapist* or psychiatrist* or psychotherapist* or physician* or doctor* or GP or GPs or practitioner* or student*)
43. reaction* within 3 (team or teams or trainee* or staff or personnel or worker* or provider*)
44. response* within 3 (therapist* or psychiatrist* or psychotherapist* or physician* or doctor* or GP or GPs or practitioner* or student*)
45. response* within 3 (team or teams or trainee* or staff or personnel or worker* or provider*)
46. impact* within 3 (therapist* or psychiatrist* or psychotherapist* or physician* or doctor* or GP or GPs or practitioner* or student*)
47. impact* within 3 (team or teams or trainee* or staff or personnel or worker* or provider*)
48. (impact* or consequence* or trauma or response* or reaction* or affect or affects or affected or effect or effects) within 3 patient* suicide
49. (impact* or consequence* or trauma or response* or reaction* or affect or affects or affected or effect or effects) within 3 client* suicide
50. #36 or #37 or #38 or #39 or #40 or #41 or #42 or #43 or #44 or #45 or #46 or #47
51. #50 and #11
52. #51 or #48 or #49
53. ti=(euthanasia or assisted suicide or assisted death or (suicide within 2 prevent*))
54. #52 not #53
55 #54 or #35

Postvention search: 29/11/05 (1987 –2005)
A free text search for 'postvention*' retrieved 7 records.

Caredata
Searched at the electronic library for social care (eLSC)
Searched: 25/10/05
No date restrictions were applied and the following search strategy retrieved 64 records;
1 suicide [in keywords] /(suicide/suicidal/self killing/killing oneself/take ones life/taking ones own life/taking ones life) [in ab/ti]

2 bereavement [in keywords] / (bereave*/grief/grieving/mourning) [in ab/ti]

3 impact* w3 relative* / impact* w3 friend* / impact* w3 colleague* / impact* w3 collegue* / impact* w3 parent / impact* w3 parents / impact* w3 sibling* / impact* w3 partner* / impact* w3 husband / impact* w3 wife / impact* w3 children / impact* w3 child / impact* w3 neighbour* / impact* w3 neighbor* / impact* w3 grandparent* / impact* w3 mother* / impact* w3 father* / impact* w3 spouse / impact* w3 son / impact* w3 sons / impact* w3 daughter* / impact* w3 family / impact* w3 families / impact* w3 grandchild*

4 consequence* w3 relative*/ consequence* w3 friend*/ consequence* w3 colleague*/ consequence* w3 collegue*/ consequence* w3 parent/ consequence* w3 parents/ consequence* w3 sibling*/ consequence* w3 partner*/ consequence* w3 husband/ consequence* w3 wife/ consequence* w3 children/ consequence* w3 child/ consequence* w3 neighbour*/ consequence* w3 neighbor*/ consequence* w3 grandparent*/ consequence* w3 mother*/ consequence* w3 father*/ consequence* w3 spouse/ consequence* w3 son/ consequence* w3 sons/ consequence* w3 daughter*/ consequence* w3 family/ consequence* w3 families/ consequence* w3 grandchild*

5 affect w3 relative*/ affect w3 friend*/ affect w3 colleague*/ affect w3 collegue*/ affect w3 parent/ affect w3 parents/ affect w3 sibling*/ affect w3 partner*/ affect w3 husband/ affect w3 wife/ affect w3 children/ affect w3 child/ affect w3 neighbour*/ affect w3 neighbor*/ affect w3 grandparent*/ affect w3 mother*/ affect w3 father*/ affect w3 spouse/ affect w3 son/ affect w3 sons/ affect w3 daughter*/ affect w3 family/ affect w3 families/ affect w3 grandchild*

6 affects w3 relative*/ affects w3 friend*/ affects w3 colleague*/ affects w3 collegue*/ affects w3 parent/ affects w3 parents/ affects w3 sibling*/ affects w3 partner*/ affects w3 husband/ affects w3 wife/ affects w3 children/ affects w3 child/ affects w3 neighbour*/ affects w3 neighbor*/ affects w3 grandparent*/ affects w3 mother*/ affects w3 father*/ affects w3 spouse/ affects w3 son/ affects w3 sons/ affects w3 daughter*/ affects w3 family/ affects w3 families/ affects w3 grandchild*

7 affected w3 relative*/ affected w3 friend*/ affected w3 colleague*/ affected w3 collegue*/ affected w3 parent/ affected w3 parents/ affected w3 sibling*/ affected w3 partner*/ affected w3 husband/ affected w3 wife/ affected w3 children/ affected w3 child/ affected w3 neighbour*/ affected w3 neighbor*/ affected w3 grandparent*/ affected w3 mother*/ affected w3 father*/ affected w3 spouse/ affected w3 son/ affected w3 sons/ affected w3 daughter*/ affected w3 family/ affected w3 families/ affected w3 grandchild*

8 effect w3 relative*/ effect w3 friend*/ effect w3 colleague*/ effect w3 collegue*/ effect w3 parent/ effect w3 parents/ effect w3 sibling*/ effect w3 partner*/ effect w3 husband/ effect w3 wife/ effect w3 children/ effect w3 child/ effect w3 neighbour*/ effect w3 neighbor*/ effect w3 grandparent*/ effect w3 mother*/ effect w3 father*/ effect w3 spouse/ effect w3 son/ effect w3 sons/ effect w3 daughter*/ effect w3 family/ effect w3 families/ effect w3 grandchild*

9 effects w3 relative*/ effects w3 friend*/ effects w3 colleague*/ effects w3 collegue*/ effects w3 parent/ effects w3 parents/ effects w3 sibling*/ effects w3 partner*/ effects w3 husband/ effects w3 wife/ effects w3 children/ effects w3 child/ effects w3 neighbour*/ effects w3 neighbor*/ effects w3 grandparent*/ effects w3 mother*/ effects w3 father*/ effects w3 spouse/ effects w3 son/ effects w3 sons/ effects w3 daughter*/ effects w3 family/ effects w3 families/ effects w3 grandchild*

10 suicide survivor*

11 surviving suicide

12 or/2-9

13 1 and 12

14 10 or 11 or 13

15 reaction* w3 resident* / reaction* w3 nurs* / reaction* w3 carer* / reaction* w3 caregiver* / (reaction* & care giver*) / reaction* w3 assistant* / reaction* w3 professional* / reaction* w3 midwife / reaction* w3 midwives / reaction* w3 pam / reaction* w3 pams / reaction* w3 clinician* / reaction* w3 counsellor* / reaction* w3 counselor* / reaction* w3 consultant* / (reaction* & health visitor*)

16 response* w3 resident*/ response* w3 nurs*/ response* w3 carer*/ (response* & care giver*) / response* w3 caregiver*/ response* w3 assistant*/ response* w3 professional*/ response* w3 midwife/ response* w3 midwives/ (response* & health visitor*) / response* w3 pam/ response* w3 pams / response* w3 clinician*/ response* w3 counsellor*/ response* w3 counselor*/ response* w3 consultant*

17 impact* w3 resident*/ impact* w3 nurs*/ impact* w3 carer*/ (impact* & care giver*)/ impact* w3 caregiver*/ impact* w3 assistant*/ impact* w3 professional*/ impact* w3 midwife/ impact* w3 midwives/ (impact* & health visitor*)/impact* w3 pam/ impact* w3 pams/ impact* w3 clinician*/ impact* w3 counsellor*/ impact* w3 counselor*/ impact* w3 consultant*

18 reaction* w3 therapist*/ reaction* w3 psychiatrist*/ reaction* w3 psychotherapist*/ reaction* w3 physician*/ reaction* w3 doctor*/ reaction* w3 GP/ reaction* w3 GPs/ reaction* w3 practitioner*/ reaction* w3 student*/ reaction* w3 team/ reaction* w3 teams/ reaction* w3 trainee*/ reaction* w3 staff/ reaction* w3 personnel/ reaction* w3 worker*/ reaction* w3 provider*

19 response* w3 therapist* / response* w3 psychiatrist* / response* w3 psychotherapist* / response* w3 physician* / response* w3 doctor* / response* w3 GP / response* w3 GPs / response* w3 practitioner* / response* w3 student* / response* w3 team / response* w3 teams / response* w3 trainee* / response* w3 staff / response* w3 personnel / response* w3 worker* / response* w3 provider*

20 impact* w3 therapist*/ impact* w3 psychiatrist*/ impact* w3 psychotherapist*/ impact* w3 physician*/ impact* w3 doctor*/ impact* w3 GP/ impact* w3 GPs/ impact* w3 practitioner*/ impact* w3 student*/ impact* w3 team/ impact* w3 teams/ impact* w3 trainee*/ impact* w3 staff/ impact* w3 personnel/ impact* w3 worker*/ impact* w3 provider*

21 (impact*/ consquence*/ trauma/ response*/ reaction*/ affect/ affects/ affected/ effect/ effects) & patient* suicide

22 (impact*/ consquence*/ trauma/ response*/ reaction*/ affect/ affects/ affected/ effect/ effects) & client* suicide

23 or/15-22

24 23 or 14

25 24 not (euthanasia or assisted suicide or assisted death or (suicide adj prevent$)).ti.

Postvention search: 29/11/05
A free text search for 'postvention*' retrieved one record.

International Bibliography of the Social Sciences (IBSS)
Searched on OvidWeb: http://gateway1.uk.ovid.com/ovidweb.cgi
Searched: 19/10/05 (1951 to October Week 02)
No date restrictions were applied and the following search strategy retrieved 25 records;
1 suicide.sh.
2 suicide.ti,ab.
3 suicidal.ti,ab.
4 self killing.ti,ab.
5 killing oneself.ti,ab.
6 kill oneself.ti,ab.
7 take ones life.ti,ab.
8 take ones own life.ti,ab.
9 taking ones own life.ti,ab.
10 taking ones life.ti,ab.
11 or/1-10
12 bereavement.sh.
13 bereav$.ti,ab.
14 grief.ti,ab.
15 grieving.ti,ab.
16 mourning.ti,ab.
17 (impact$ adj (relative$ or friend$ or colleague$ or collegue$ or parent or parents or sibling$ or partner$ or husband or wife or children or child or neighbour$ or neighbor$ or grandparent$ or mother$ or father$ or spouse or son or sons or daughter$ or family or families or grandchild$)).ti,ab.
18 (consequence$ adj (relative$ or friend$ or colleague$ or collegue$ or parent or parents or sibling$ or partner$ or husband or wife or children or child or neighbour$ or neighbor$ or grandparent$ or mother$ or father$ or spouse or son or sons or daughter$ or family or families or grandchild$)).ti,ab.
19 (affect adj (relative$ or friend$ or colleague$ or collegue$ or parent or parents or sibling$ or partner$ or husband or wife or children or child or neighbour$ or neighbor$ or grandparent$ or

mother$ or father$ or spouse or son or sons or daughter$ or family or families or grandchild$)).ti,ab.
20 (affects adj (relative$ or friend$ or colleague$ or collegue$ or parent or parents or sibling$ or partner$ or husband or wife or children or child or neighbour$ or neighbor$ or grandparent$ or mother$ or father$ or spouse or son or sons or daughter$ or family or families or grandchild$)).ti,ab.
21 (affected adj (relative$ or friend$ or colleague$ or collegue$ or parent or parents or sibling$ or partner$ or husband or wife or children or child or neighbour$ or neighbor$ or grandparent$ or mother$ or father$ or spouse or son or sons or daughter$ or family or families or grandchild$)).ti,ab.
22 (effect adj (relative$ or friend$ or colleague$ or collegue$ or parent or parents or sibling$ or partner$ or husband or wife or children or child or neighbour$ or neighbor$ or grandparent$ or mother$ or father$ or spouse or son or sons or daughter$ or family or families or grandchild$)).ti,ab.
23 (effects adj (relative$ or friend$ or colleague$ or collegue$ or parent or parents or sibling$ or partner$ or husband or wife or children or child or neighbour$ or neighbor$ or grandparent$ or mother$ or father$ or spouse or son or sons or daughter$ or family or families or grandchild$)).ti,ab.
24 suicide survivor$.ti,ab.
25 surviving suicide.ti,ab.
26 or/12-23
27 11 and 26
28 24 or 25 or 27
29 (reaction$ adj3 (resident$ or nurs$ or carer$ or care giver$ or caregiver$ or assistant$ or professional$ or midwife or midwives or health visitor$ or pam or pams or clinician$ or counsellor$ or counselor$ or consultant$)).ti,ab.
30 (response$ adj3 (resident$ or nurs$ or carer$ or care giver$ or caregiver$ or assistant$ or professional$ or midwife or midwives or health visitor$ or pam or pams or clinician$ or counsellor$ or counselor$ or consultant$)).ti,ab.
31 (impact$ adj3 (resident$ or nurs$ or carer$ or care giver$ or caregiver$ or assistant$ or professional$ or midwife or midwives or health visitor$ or pam or pams or clinician$ or counsellor$ or counselor$ or consultant$)).ti,ab.
32 (reaction$ adj3 (therapist$ or psychiatrist$ or psychotherapist$ or physician$ or doctor$ or GP or GPs or practitioner$ or student$ or team or teams or trainee$ or staff or personnel or worker$ or provider$)).ti,ab.
33 (response$ adj3 (therapist$ or psychiatrist$ or psychotherapist$ or physician$ or doctor$ or GP or GPs or practitioner$ or student$ or team or teams or trainee$ or staff or personnel or worker$ or provider$)).ti,ab.
34 (impact$ adj3 (therapist$ or psychiatrist$ or psychotherapist$ or physician$ or doctor$ or GP or GPs or practitioner$ or student$ or team or teams or trainee$ or staff or personnel or worker$ or provider$)).ti,ab.
35 ((impact$ or consequence$ or trauma or response$ or reaction$ or affect or affects or affected or effect or effects) adj3 patient$ suicide).ti,ab.
36 ((impact$ or consequence$ or trauma or response$ or reaction$ or affect or affects or affected or effect or effects) adj3 client$ suicide).ti,ab.
37 or/29-34
38 37 and 11
39 35 or 36 or 38
40 39 not (euthanasia or assisted suicide or assisted death or (suicide adj prevent$)).ti.
41 28 or 40

Postvention search: 29/11/05 (1951 –November Week 4 2005)
A search for ‘postvention$.ti,ab’ retrieved 2 records.

Science Citation Index (SCI)
Searched on ISI Web of Knowledge via MIMAS: http://wos.mimas.ac.uk/
Update search: 27/10/05 (2004 – 2005)
The search strategies by King et al 2004[29] were rerun and retrieved 111 records.
Postvention search: 29/11/05 (1981 – 26 November 2005)
A free text search for ‘postvention*’ retrieved 3 records.

Social Policy and Practice
Searched on WebSPIRS via OVID http://arc.uk.ovid.com/
Searched: 02/12/05 (1890 - 2005)

No date restrictions were applied and this search strategy included a free text search for postvention and retrieved 81 records.

1 suicide in de
2 (suicide in ti) or (suicide in ab)
3 (suicidal in ti) or (suicidal in ab)
4 (self killing in ti) or (self killing in ab)
5 (killing oneself in ti) or (killing oneself in ab)
6 (kill oneself in ti) or (kill oneself in ab)
7 (take ones life in ti) or (take ones life in ti)
8 (take ones own life in ti) or (take ones own life in ab)
9 (taking ones own life in ti) or (taking ones own life in ab)
10 (taking ones life in ti) or (taking ones life in ab)
11 #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10
12 bereavement in de
13 (bereav* in ti) or (bereav* in ab)
14 (grief in ti) or (grief in ab)
15 (grieving in ti) or (grieving in ab)
16 (mourning in ti) or (mourning in ab)
17 ((impact* and (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor* or grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)) in ti) or ((impact* and (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor* or grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)) in ab)
18 ((consequence* and (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor* or grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)) in ti) or ((consequence* and (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor* or grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)) in ab)
19 ((affect and (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor* or grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)) in ti) or ((affect and (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor* or grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)) in ab)
20 ((affects and (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor* or grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)) in ti) or ((affects and (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor* or grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)) in ab)
21 ((affected and (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor* or grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)) in ti) or ((affected and (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor* or grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)) in ab)
22 ((effect and (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor* or grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)) in ti) or ((effect and (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor* or grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)) in ab)
23 ((effects and (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor* or grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)) in ti) or ((effects and (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or

neighbor* or grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)) in ab)
24 suicide survivor* in ti or suicide survivor* in ab
25 surviving suicide in ti or surviving suicide in ab
26 #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21 or #22 or #23
27 #11 and #26
28 #24 or #25 or #27
29 ((reaction* and (resident* or nurs* or carer* or care giver* or caregiver* or assistant* or professional* or midwife or midwives or health visitor* or pam or pams or clinician* or counsellor* or counselor* or consultant*)) in ti) or ((reaction* and (resident* or nurs* or carer* or care giver* or caregiver* or assistant* or professional* or midwife or midwives or health visitor* or pam or pams or clinician* or counsellor* or counselor* or consultant*)) in ab)
30 ((response* and (resident* or nurs* or carer* or care giver* or caregiver* or assistant* or professional* or midwife or midwives or health visitor* or pam or pams or clinician* or counsellor* or counselor* or consultant*)) in ti) or ((response* and (resident* or nurs* or carer* or care giver* or caregiver* or assistant* or professional* or midwife or midwives or health visitor* or pam or pams or clinician* or counsellor* or counselor* or consultant*)) in ab)
31 ((impact* and (resident* or nurs* or carer* or care giver* or caregiver* or assistant* or professional* or midwife or midwives or health visitor* or pam or pams or clinician* or counsellor* or counselor* or consultant*)) in ti) or ((impact* and (resident* or nurs* or carer* or care giver* or caregiver* or assistant* or professional* or midwife or midwives or health visitor* or pam or pams or clinician* or counsellor* or counselor* or consultant*)) in ab)
32 ((reaction* and (therapist* or psychiatrist* or psychotherapist* or physician* or doctor* or GP or GPs or practitioner* or student* or team or teams or trainee* or staff or personnel or worker* or provider*)) in ti) or ((reaction* and (therapist* or psychiatrist* or psychotherapist* or physician* or doctor* or GP or GPs or practitioner* or student* or team or teams or trainee* or staff or personnel or worker* or provider*)) in ab)
33 ((response* and (therapist* or psychiatrist* or psychotherapist* or physician* or doctor* or GP or GPs or practitioner* or student* or team or teams or trainee* or staff or personnel or worker* or provider*)) in ti) or ((response* and (therapist* or psychiatrist* or psychotherapist* or physician* or doctor* or GP or GPs or practitioner* or student* or team or teams or trainee* or staff or personnel or worker* or provider*)) in ab)
34 ((impact* and (therapist* or psychiatrist* or psychotherapist* or physician* or doctor* or GP or GPs or practitioner* or student* or team or teams or trainee* or staff or personnel or worker* or provider*)) in ti) or ((impact* and (therapist* or psychiatrist* or psychotherapist* or physician* or doctor* or GP or GPs or practitioner* or student* or team or teams or trainee* or staff or personnel or worker* or provider*)) in ab)
35 (((impact* or consequence* or trauma or response* or reaction* or affect or affects or affected or effect or effects) and patient* suicide) in ti) or (((impact* or consequence* or trauma or response* or reaction* or affect or affects or affected or effect or effects) and patient* suicide) in ab)
36 (((impact* or consequence* or trauma or response* or reaction* or affect or affects or affected or effect or effects) and client* suicide) in ti) or (((impact* or consequence* or trauma or response* or reaction* or affect or affects or affected or effect or effects) and client* suicide) in ab)
37 #29 or #30 or #31 or #32 or #33 or #34
38 #37 and #11
39 #35 or #36 or #38
40 ((euthanasia or assisted suicide or assisted death or (suicide and prevent*)) in ti) or ((euthanasia or assisted suicide or assisted death or (suicide and prevent*)) in ab)
41 #39 not #40
42 #28 or #41
43 (postvention* in ti) or (postvention* in ab)
44 #42 or #43

Social Science Citation Index (SSCI)/ Science Citation Index (SCI)
Searched on ISI Web of Knowledge via MIMAS: http://wos.mimas.ac.uk/
Update search: 27/10/05 (2004 – 2005)
The search strategies by King et al 2004[29] were rerun and retrieved 152 records.
Postvention search: 29/11/05 (1981 – 26 November 2005)
A free text search for 'postvention*' retrieved 35 records.

Social Services Abstracts
Searched via CSA Illumina http://ca2.csa.com/
Searched: 28/11/05 (1980 – 2005)
This search strategy retrieved 154 records;
1. Grief (Soc Sci Abs thesaurus term)
2. suicide
3. suicidal
4. self killing
5. killing oneself
6. kill oneself
7. take ones life
8. take ones own life
9. taking ones own life
10. taking ones life
11. #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10
12. bereavement (Soc Sci Abs thesaurus term - exploded)
13. bereave*
14. grief
15. grieving
16. mourning
17. impact* within 2 (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor*)
18. impact* within 2 (grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)
19. consequence* within 2 (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor*)
20. consequence* within 2 (grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)
21. affect within 2 (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour*)
22. affect within 2 (neighbor* or grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)
23. affects within 2 (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor*)
24. affects within 2 (grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)
25. affected within 2 (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor*)
26. affected within 2 (grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)
27. effect within 2 (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour* or neighbor*)
28. effect within 2 (grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)
29. effects within 2 (relative* or friend* or colleague* or collegue* or parent or parents or sibling* or partner* or husband or wife or children or child or neighbour*)
30. effects within 2 (neighbor* or grandparent* or mother* or father* or spouse or son or sons or daughter* or family or families or grandchild*)
31. suicide within 2 survivor*
32. surviving within 2 suicide
33. #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21 or #22 or #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30
34. #11 and #33
35. #31 or #32 or #34
36. reaction* within 3 (resident* or nurs* or carer* or care giver* or caregiver* or assistant* or professional* or midwife or midwives or health visitor*)
37. reaction* within 3 (pam or pams or clinician* or counsellor* or counselor* or consultant*)
38. response* within 3 (resident* or nurs* or carer* or care giver* or caregiver* or assistant* or professional* or midwife or midwives or health visitor*)
39. response* within 3 (pam or pams or clinician* or counsellor* or counselor* or consultant*)

40. impact* within 3 (resident* or nurs* or carer* or care giver* or caregiver* or assistant* or professional* or midwife or midwives or health visitor*)
41. impact* within 3 (pam or pams or clinician* or counsellor* or counselor* or consultant*)
42. reaction* within 3 (therapist* or psychiatrist* or psychotherapist* or physician* or doctor* or GP or GPs or practitioner* or student*)
43. reaction* within 3 (team or teams or trainee* or staff or personnel or worker* or provider*)
44. response* within 3 (therapist* or psychiatrist* or psychotherapist* or physician* or doctor* or GP or GPs or practitioner* or student*)
45. response* within 3 (team or teams or trainee* or staff or personnel or worker* or provider*)
46. impact* within 3 (therapist* or psychiatrist* or psychotherapist* or physician* or doctor* or GP or GPs or practitioner* or student*)
47. impact* within 3 (team or teams or trainee* or staff or personnel or worker* or provider*)
48. (impact* or consequence* or trauma or response* or reaction* or affect or affects or affected or effect or effects) within 3 patient* suicide
49. (impact* or consequence* or trauma or response* or reaction* or affect or affects or affected or effect or effects) within 3 client* suicide
50. #36 or #37 or #38 or #39 or #40 or #41 or #42 or #43 or #44 or #45 or #46 or #47
51. #50 and #11
52. #51 or #48 or #49
53. ti=(euthanasia or assisted suicide or assisted death or (suicide within 2 prevent*))
54. #52 not #53
55 #54 or #35

Postvention search: 29/11/05 (1980 – 2005)
A free text search for 'postvention*' retrieved 7 records.

Databases of reports, conference proceedings and grey literature

Health Technology Assessment Database (HTA)
Searched at http://www.york.ac.uk/inst/crd/crddatabases.htm
Update search: 28/10/05
The search strategy by King et al 2004[29] was rerun and retrieved 3 records.
Postvention search: 01/12/05
A free text search for 'postvention' retrieved no records.

Index to Theses
Searched at http://www.theses.com/
Searched: 25/10/05
No date restrictions were applied and this search strategy retrieved 32 records.
(Suicide or Suicidal or "Self killing" or "Killing oneself" or "Kill oneself" or "Take ones life" or "Take ones own life" or "Taking ones own life" or "Taking ones life") and (impact or consequence or affect or effect or bereavement or grief or grieving or mourning)
Postvention search: 01/12/05 (1716 – 9 November 2005)
A free text search for 'postvention' retrieved no records.

Inside Conferences
Searched on DIALOG
Searched: 25/10/05 (1993 – October Week 4 2005)
No date restrictions were applied and this search strategy retrieved 55 records;
s suicide/DE
s suicide
s suicidal
s self(w)killing
s killing(w)oneself
s kill(w)oneself
s take(w)ones(w)life
s take(w)ones(w)own(w)life
s taking(w)ones(w)own(w)life
s taking(w)ones(w)life
s S1:S10
s bereavement/DE

s bereave?
s grief
s grieving
s mourning
s (impact?(2w)(relative? or friend? or colleague? or collegue? or parent or parents or sibling? or partner? or husband or wife or children or child or neighbour? or neighbor?))
s (impact?(2w)(grandparent? or mother? or father? or spouse or son or sons or daughter? or family or families or grandchild?))
s (consequence?(2w)(relative? or friend? or colleague? or collegue? or parent or parents or sibling? or partner? or husband or wife or children or child or neighbour? or neighbor?))
s (consequence?(2w)(grandparent? or mother? or father? or spouse or son or sons or daughter? or family or families or grandchild?))
s (affect(2w)(relative? or friend? or colleague? or collegue? or parent or parents or sibling? or partner? or husband or wife or children or child or neighbour?))
s (affect(2w)(neighbor? or grandparent? or mother? or father? or spouse or son or sons or daughter? or family or families or grandchild?))
s (affects(2w)(relative? or friend? or colleague? or collegue? or parent or parents or sibling? or partner? or husband or wife or children or child or neighbour? or neighbor?))
s (affects(2w)(grandparent? or mother? or father? or spouse or son or sons or daughter? or family or families or grandchild?))
s (affected(2w)(relative? or friend? or colleague? or collegue? or parent or parents or sibling? or partner? or husband or wife or children or child or neighbour? or neighbor?))
s (affected(2w)(grandparent? or mother? or father? or spouse or son or sons or daughter? or family or families or grandchild?))
s (effect(2w)(relative? or friend? or colleague? or collegue? or parent or parents or sibling? or partner? or husband or wife or children or child or neighbour? or neighbor?))
s (effect(2w)(grandparent? or mother? or father? or spouse or son or sons or daughter? or family or families or grandchild?))
s (effects(2w)(relative? or friend? or colleague? or collegue? or parent or parents or sibling? or partner? or husband or wife or children or child or neighbour?))
s (effects(2w)(neighbor? or grandparent? or mother? or father? or spouse or son or sons or daughter? or family or families or grandchild?))
s suicide(w)survivor?
s surviving(w)suicide
s S12:S30
s S11 and S33
s S31 or S32 or S34
s (reaction?(3w)(resident? or nurs? or carer? or care(w)giver? or caregiver? or assistant? or professional? or midwife or midwives or health(w)visitor?))
S (reaction?(3w)(pam or pams or clinician? or counsellor? or counselor? or consultant?))
s (response?(3w)(resident? or nurs? or carer? or care(W) giver? or caregiver? or assistant? or professional? or midwife or midwives or health(W)visitor?))
s (response?(3w)(pam or pams or clinician? or counsellor? or counselor? or consultant?))
s (impact?(3w)(resident? or nurs? or carer? or care(W)giver? or caregiver? or assistant? or professional? or midwife or midwives or health(W)visitor?))
s (impact?(3w)(pam or pams or clinician? or counsellor? or counselor? or consultant?))
s (reaction?(3w)(therapist? or psychiatrist? or psychotherapist? or physician? or doctor? or GP or GPs or practitioner? or student?))
s (reaction?(3w)(team or teams or trainee? or staff or personnel or worker? or provider?))
s (response?(3w)(therapist? or psychiatrist? or psychotherapist? or physician? or doctor? or GP or GPs or practitioner? or student?))
s (response?(3w)(team or teams or trainee? or staff or personnel or worker? or provider?))
s (impact?(3w)(therapist? or psychiatrist? or psychotherapist? or physician? or doctor? or GP or GPs or practitioner? or student?))
s (impact?(3w)(team or teams or trainee? or staff or personnel or worker? or provider?))
s ((impact? or consquence? or trauma or response? or reaction? or affect or affects or affected or effect or effects)(3w)(patient?(w)suicide))
s ((impact? or consquence? or trauma or response? or reaction? or affect or affects or affected or effect or effects)(3w)(client?(w)suicide))
s s36:s47

s s50 and s11
s s51 or s48 or s49
s s52 not (euthanasia or assisted(w)suicide or assisted(w)death or (suicide(2n)prevent?))/ti
s s53 or s35
Postvention search: 29/11/05 (1993 – November Week 4 2005)
A free text search for 'postvention?' retrieved 9 records.

ISI Proceedings: Science and Technology and ISI Proceedings: Social Science and Humanities
Searched on ISI Web of Knowledge via MIMAS: http://wos.mimas.ac.uk/
Update search: 25/10/05 (2004 – 2005)
The search strategies by King et al 2004[29] were rerun and retrieved 17 records.
Postvention search: 29/11/05 (1990 – 25 November 2005)
A free text search for 'postvention*' retrieved 7 records.

ProQuest Digital Dissertations
Searched at http://wwwlib.umi.com/dissertations/
Searched: 25/10/05
No date restrictions were applied and this search strategy retrieved 63 records.
suicide or suicidal in title
Postvention search: 29/11/05 (2004 - 2005)
A free text search for 'postvention?' retrieved one record.

SIGLE (System for Information on Grey Literature in Europe)
Searched on WebSPIRS via OVID http://arc.uk.ovid.com/
Update search: 25/10/05 (1980 – 2005/03)
The search strategies by King et al 2004[29] were rerun and retrieved 13 records.
Postvention search: 29/11/05 (1980 – 2005/03)
A free text search for 'postvention$.ti,ab' retrieved no records.

Ongoing research
National Research Register (NRR)
Searched on CD-ROM
Update search: 20/10/05 (2005: Issue 3)
The search strategy by King et al 2004[29] was rerun and retrieved 23 records.
Postvention search: 29/11/05 (2005: Issue 3)
A free text search for 'postvention*' retrieved no records.

APPENDIX B: UNSCREENED STUDIES

Gibson LM, Gornell N. (2001). Client suicide and the effects on the therapist: how we prepare ourselves could make the difference. Clinical Psychology 2001;(8) Dec:11-14.
The British Library could not locate the article from the information available. Contacted source: ASSIA, who stated that the reference is correct. No response from the publishers, the British Psychological Society.

Hill W. Intervention and postvention in schools: suicide in the young. Littleton: John Wright; 1984.
This article is not available from the British Library, nor any of the universities on COPAC.

Lamb F. et al. Postvention for educational systems. In: Rotheram-Borus MJ, Bradley J, Obolensky N, editors. Planning to live: evaluating and treating suicidal teens in community settings. Norman: National Resource Centre for Youth Services, University of Oklahoma; 1990. p. 275-294.
This article is not available from the British Library, have requested a paper copy of the article from the University of Oklahoma, but this has not been received..

Martin G. Postvention in a school. Youth Studies Australia 1992;11:24-7.
This article is not available from the British Library, and no response was received from the journal editors.

Steele W. Traumatic and troubling losses for children: individual and organised interventions. Detroit: Institute for Trauma and Loss; 1992.
This article is not available from the British Library, and the organisation no longer has the article.

APPENDIX C: ASSESSMENT OF STUDY QUALITY

	Campbell[34]	Constantino[35]	De Groot[40]	Farberow[38]	Kovac[36]	Pfeffer[37]	Poijula[33]	Seguin [39]
If described as an RCT, was the assignment to treatment groups really random?	NA	Yes	Yes	NA	NR	No	NA	NA
If described as an RCT, was the treatment allocation concealed?	NA	NR	Yes	NA	NR	NR	NA	NA
Was the assignment of participants to treatments described?	Yes	Yes	Yes	Yes	No	Yes	No	No
Were the groups balanced at baseline in relation to potential confounders?	Yes[a]	NR	No	No	No	No	NR	Unclear
Were baseline differences adequately adjusted for in the design or in the analysis?	No	No	Yes	No	No	Yes	No	Unclear
Were important confounders reported?	No	No[b]	Yes	Yes	Yes	Yes	No[b]	Yes
Was outcome assessment blind to group allocation?	NA	NA	No	NR	NA	Yes	NA	NR
What proportion of participants completed the study?	100%	78%	91%	100%	71%	55%	98%	33%
Were drop-out rates and reasons similar across intervention and control group?	NA	NR	Yes	NR	NR	No	NR	No
Were the data collection tools shown or known to be valid for the outcome	NR	Partial	Partial	No	Partial	Yes	No	Partial
If partial, give details		BDI is known to be a valid measure	CESD a valid measure. TRGR2L and suicidal ideation questions used in previous studies. The questions on perception of being to blame were constructed for the study and information on validity was reported		Reported for IES and GEQ. Reported to be not available for GRQ.			BDI is known to be a valid measure.

	Campbell[34]	Constantino[35]	De Groot[40]	Farberow[38]	Kovac[36]	Pfeffer[37]	Poijula[33]	Seguin [39]
Were the data collection tools shown or known to be reliable for the outcome	NR	Yes	Partial	No	Partial	Yes	No	Yes
If partial, give details			As above		As above			
Was the statistical analysis appropriate?	No	No	Yes	NR	Yes	Yes	No	NA
Did the analyses include an intention to treat analysis?	NA	No	Unclear[c]	NA	No	No	NA	NA
Was the consistency of the intervention measured?	NR	No	Unclear[d]	No	No	Yes	No	No
If yes, was the intervention provided to all participants in the same way?			NA			Yes		
Is it likely that participants received an unintended co-intervention?	No	No	No	Unclear	No	Yes	Unclear	Unclear
Is it likely that contamination may have influenced the results?	No	No	No	Unclear	No	Yes	No	No
Was the length of follow-up long enough for the outcomes to occur?	NA	Yes	Yes	No	No	No	No	Yes

[a] For a minimal number of variables; [b] not for both groups separately; [c] the authors state that an ITT analysis was used but baseline and follow-up data are reported only for those who completed the study; [d] the counselling sessions were audiotaped to monitor counselling concepts and for supervision purposes but it was unclear if they were used to formally monitor the consistency of the intervention

NA not applicable; NR not reported

Study details	Participants	Interventions	Results	Comments
Author Campbell(2002)[34] **Title** The influence of an active postvention on the length of time elapsed before survivors of suicide seek treatment **Country** US **Study design** Observational with a control group (retrospective) **How were participants assigned** The participants were recruited from people who had self-referred to an urban crisis centre for an assessment for treatment following their bereavement. Survivors of suicides that took place between January 1999 and December 2001 in East Baton Rouge Parish received the intervention. Individuals in the control group either lived outside of the area or the suicide occurred prior to January 1999	**Number of participants recruited** *Intervention:* n = 50 *Comparison:* n = 76 There were a total of 83 suicides **Age groups participating** Adults and children **Ages** *Intervention:* Mean 40.62 (SD 12.12), Range 18-61 years *Comparison:* Mean 38.97 (SD 15.37), Range 14-85 years **Relationship to deceased** *Intervention:* Mixed group - Wife (18%); mother (16%); sister (4%); brother (10%); father (14%); daughter (6%); friend (6%); girlfriend (8%); son in law (4%); other relationships with a frequency of less than 3% (14%) *Comparison:* Mixed group - Wife (13%); mother (14.5%); sister (14.5%); brother (6.5%); father (2.7%); daughter (7.9%); friend (7.9%); husband (6.5%); son (7.9%); other relationships with a frequency of less than 3% (18.6%) **Time since bereavement** *Intervention:* Mean 1.26 months (2.04), Range 0.067-8.7 months *Comparison:* Mean 42.11 months (108.46), Range 0.1-534.2 months **Males** *Intervention:* n = 18 *Comparison:* n = 27	**Setting** *Intervention:* Intervention was administered at scene of suicide *Comparison:* Not applicable **Family, group or individual intervention** *Intervention:* Group *Comparison:* Not applicable **Professionally led or self-help** *Intervention:* Professionally led *Comparison:* Not applicable **Description of intervention and comparison** *Intervention:* Active postvention model known as the Local Outreach to Survivors of Suicide program (LOSS). Staffed by a team of responders to the scenes of suicide as close to time of death notification as possible. The aim of the LOSS team is to provide comfort and advice for those bereaved by suicide *Comparison:* Survivors that had not been visited by the LOSS team (passive model of postvention) **Description of delivery** *Intervention:* Calls to the LOSS team initiated by the East Baton Rouge Parish Coroner's office. The response team is in addition to the traditional first responders - such as police, coroners etc. and aims to refer survivors for help. *Comparison:* Not applicable **Length of treatment** *Intervention:* Unclear-responders assisted the newly bereaved at the scene of suicide	**Number of participants lost to follow up** None - retrospective study **Reasons for dropping out** *Intervention:* Not applicable - all individuals bereaved by suicide who came to the crisis centre for an assessment between January 1 1999 and December 31 2000 were included. *Comparison:* Not applicable – as above **Any differences between those who dropped out and those who didn't** *Intervention:* Not reported *Comparison:* Not reported **Details of statistical analysis** Used t-tests and chi-squared tests to investigate differences between those receiving the intervention and those who did not in terms of age, gender, race, relationship to the deceased. Primary outcome was the time elapsed from suicide to assessment at the urban crisis centre **Results** Outcome: Length of time between suicide and bereaved seeking treatment (days) *Intervention:* Mean 37.7 days (SD 61.2) *Comparison:* Mean 222.2 days (SD 240.7). p<.001 This was an independent t-test with nine outliers (for length of time since bereavement) in the control group excluded	Statistical analysis seemed inappropriate as parametric tests were used (t-tests) and the data did not appear to be normally distributed - the standard deviations were larger than the means. Although patients were recruited to the study through self-referral, the actual intervention was received on the basis of professional-referral (the coroner). Nine study participants were eliminated from the comparative analysis as extreme outliers (more than 3 years had elapsed between the time of suicide and assessment). This gave an adjusted control mean time since bereavement of 7.41 months (SD=8.02 months) - used in the subsequent analyses. The intervention was categorised as a group intervention as it appears to be whoever is present at the scene is involved, however it could also have been administered on a one-to-one basis. Very limited range of potential prognostic criteria measured. It was unclear if the study was appropriately powered.

	Ethnicity *Intervention:* Caucasian (n=48) Black (n=2) *Comparison:* Caucasian (n=75) Black (n=1) **Education** *Intervention:* Not reported *Comparison:* Not reported **Any other socioeconomic or cultural data** None reported **Any other additional potential prognostic factors reported?** No **Were there any baseline differences between the groups?** No - statistical analysis (t-tests and chi-square) showed no significant differences between the two groups for race, gender or age **How were the participants recruited?** Self-referral **Any information reported about the deceased?** No **Were there any inclusion/exclusion criteria?** No - all individuals bereaved by suicide who came to the crisis centre for an assessment between January 1 1999 and December 31 2000 were included	*Comparison:* Not applicable **Length of follow-up** Retrospective study **Implemented by** *Intervention:* Mental health workers and survivors of suicide *Comparison:* Not applicable **Details of professional background** *Intervention:* LOSS team comprises of centre staff (8 mental health workers) from a 24-hour crisis intervention centre and volunteers (4) who are survivors of suicide. *Comparison:* Not applicable **Specific training to implement intervention** *Intervention:* Yes. Trained in crisis intervention, critical incidence stress debriefing, facilitating survivor grief recovery and in responding to the scenes of suicide. No details provided of content of training *Comparison:* Not applicable **Any further details** *Intervention:* Members of the intervention team completed the BDI, Beck Anxiety Inventory and Hayes-Jackson Bereavement survey each 60 days *Comparison:* Nine study participants were eliminated from the comparative analysis as extreme outliers (more than 3 years had elapsed between the time of suicide and assessment). This gave an adjusted control mean time since bereavement of 7.41 months (SD=8.02 months) - used in the subsequent analyses		

Study details **Author** Constantino(2001)[35] Related to Constantino (1996)[41] **Title** Group intervention for widowed survivors of suicide **Country** US **Study design** RCT **How were participants assigned to groups?** Randomised-no further details	**Participants** **Number of participants recruited** *Total:* n = 60 Not reported separately for intervention and comparison group **Age groups participating** Adults **Ages** *Total:* Range 24-70 years* Not reported separately for intervention and comparison group **Relationship to deceased** *Intervention:* Spouse/partner *Comparison:* Spouse/partner **Time since bereavement** *Total:* Mean 10.91(SD 8.65), Range 1-27 months* Not reported separately for intervention and comparison group **Males** *Total:* n = 10* Not reported separately for intervention and comparison group **Ethnicity** *Total:* African American 6%, Asian 2%, Caucasian 91%* Not reported separately for intervention and comparison **Education** *Total:* High school 36%, College/university 64%* Not reported separately for intervention and comparison **Any other socioeconomic or cultural data** *Total:* 50% of participants earned between $10,000 and $30,000, 57%	**Interventions** **Setting** *Intervention:* Not reported *Comparison:* Not reported **Family, group or individual intervention** *Intervention:* Group *Comparison:* Group **Professionally led or self-help** *Intervention:* Professionally-led *Comparison:* Professionally-led **Description of intervention and comparison** *Intervention:* Bereavement Group Postvention (BGP) Primary aim was to promote adaptive coping strategies and to enhance the remodelling of relationships. The group leader had an active role in defining, setting and assisting participants to achieve realistic goals. It emphasised the 12 curative factors of group psychotherapy as formulated by Yalom (1985). Groups of 4 to 6 participants were set up *Comparison:* Social Group Postvention (SGP) Promoted socialisation, recreation and leisure. Reflected the work of Iso-Ahola (1980) and Neulinger (1981). The focus was on encouraging group members to engage in planning weekly activities. Groups of 4 to 6 participants were set up **Description of delivery** *Intervention:* The sequence of content for the sessions were planned, structured and phase	**Results** **Number of participants lost to follow up** *Total:* 13 (excluded from analysis as they attended less than 4 group sessions) Not reported separately for intervention and comparison **Reasons for dropping out** Not reported **Any differences between those who dropped out and those who didn't** *Intervention:* Not reported *Comparison:* Not reported **Details of statistical analysis** One way analysis of variance (ANOVA) was used to assess change from baseline to the three follow-up points. The Bonferroni correction was applied and a significant p-value was set at <.001. Where there was a significant time effect, post-hoc analysis was used to assess whether there was a significant difference between baseline and 2 months; between 2 months and 6 months; and between 6 months and one year. Number of participants in analysis: total n=47 **Results** The authors reported that there were no statistically significant differences between the SGP and BGP at baseline or at any of the follow-up points (data not reported). The follow-up data was reported for both groups combined BDI Mean (SD) Baseline 18.66 (11.24); 2mth 7.62 (5.03); 6mth 8.34 (4.26); 12mth 7.70 (5.18). One way ANOVA p=.0001. Post hoc tests: the change from baseline to 2mth follow-up was statistically significant (p<.0001) GEI-rumination Mean (SD): Baseline 6.11 (2.66); 2mth 5.06 (2.78); 6 mth 4.57 (3.08); 12 mth 2.66 (2.52). One way ANOVA p=.0001. Post hoc tests: the change between baseline and 2mth follow-up	**Comments** Outcome assessment was by self-report Details of analysis not reported for between group comparison and the two groups were combined for the before and after analysis Self-selected group of participants No information on dropouts and whether they differed in the two groups Both groups receive an active intervention. Due to the lack of control group it is difficult to establish whether the improvement over time would have happened regardless of the interventions Limited range of potential prognostic data reported and this was reported for both groups combined It was unclear if the study was appropriately powered

	lived with their children, 60% were Protestant Not reported separately for intervention and comparison * This demographic data refers to the 47 participants who attended all eight group sessions and were included in the analysis **Any other additional potential prognostic factors reported?** No **Were there any baseline differences between the groups?** Unclear- the authors reported that there were no statistically significant differences between the SGP and BGP groups at baseline (data not reported) but this seemed to refer to the participants who were included in the analysis and not all participants at baseline. It was unclear whether the groups were similar at baseline on demographic variables **How were the participants recruited?** Self-referral and professional referral **Any information reported about the deceased?** Method of suicide: gunshot (n=25) and carbon monoxide poisoning (n=19) **Were there any inclusion/exclusion criteria?** Unclear	specific (no details provided). Delivery of BGP and SGP was monitored. Group content, focus and activity were assessed from group progress notes kept by the group leader and observations. *Comparison:* The sequence of content was primarily determined by the group participants and the group leader was responsible for creating a conducive environment. Monitoring of delivery same as BGP **Length of treatment** *Intervention:* 1.5 hour weekly sessions over 8 weeks *Comparison:* 1.5 hour weekly sessions over 8 weeks **Length of follow-up** 2, 6 and 12 months **Implemented by** *Intervention:* Professional *Comparison:* Professional **Details of professional background** *Intervention:* Two leaders with a minimum of a master's degree in mental health nursing *Comparison:* Same as BGP **Specific training to implement intervention** *Intervention:* A 16 hour training programme was delivered over 3 days, focusing on knowledge, attitude, style and clinical skills, followed by a written examination in which a minimum score of 90% had to be achieved. Weekly one hour supervisory meetings were	was statistically significant GEI-despair Mean (SD): Baseline 9.34 (5.16); 2mth 6.83 (4.98); 6mth 5.11 (4.63); 12mth 5.36 (4.08)> One way ANOVA p=.0001. Post hoc tests: the change between baseline and 2mth follow-up was statistically significant. GEI- anger/hostility Mean (SD): Baseline 5.45 (2.39); 2mth 5.38 (2.12); 6mth 5.00 (2.85); 12mth 4.34 (2.95) One way ANOVA: not significant (p=0.1039) GEI-guilt Mean (SD): Baseline 2.83 (1.82); 2mth 2.04 (1.89); 6mth 1.87 (1.94); 12mth 1.83 (2.20) One way ANOVA: not significant (p=0.032) GEI-loss of control Mean (SD): Baseline 5.75 (2.33); 2mth 5.21 (2.10); 6 mth 4.36 (2.46); 12mth 3.51 (2.90). One way ANOVA p=.0001. Post hoc tests: the change between 2mth and 6mth follow-up was statistically significant. GEI- depersonalisation Mean (SD): Baseline 6.15 (1.82); 2mth 4.79 (2.15); 6mth 3.87 (2.16); 12mth 2.98 (2.35). One way ANOVA p=.0001. Post hoc tests: the change between baseline and 2mth follow-up was statistically significant. GEI-somatisation Mean (SD): Baseline 8.11 (4.39); 2mth 6.47 (4.53); 6mth 4.90 (SD 4.09); 12 mth 4.13 (3.93). One way ANOVA p=.0001. Post hoc tests: the change between baseline and 2mth follow-up was statistically significant. GEI-death anxiety Mean (SD): Baseline 5.79 (2.21); 2mth 5.02 (2.78); 6mth 3.81 (2.81); 12mth 3.68 (2.91). One way ANOVA p=.0001. Post hoc tests: the change between baseline and 2 mth follow-up was statistically significant.	

		also held between group leaders and the principal investigator. *Comparison:* Same as BGP **Any further details** The time from baseline assessment to receiving the intervention ranged from 1 to 3 weeks Participants in BGP and SGP groups received the phone numbers of the research team, and details of referral agencies and community resources including the phone number of a 24 hour crisis line	GEI-social isolation Mean (SD): Baseline 3.21 (2.20); 2mth 3.04 (2.10); 6mth 2.23 (2.07); 12 mth 2.78 (SD 2.54) One-way ANOVA: not significant (p=0.0807) BSI-total Mean (SD): Baseline 0.99 (0.69); 2mth 0.80 (0.59); 6 mth 0.64 (0.59); 12mth 0.55 (0.46). One way ANOVA p=.0001. Post hoc tests: the change from baseline to 12mth follow-up was statistically significant BSI-obsessive compulsive Mean (SD): Baseline 1.53 (1.04); 2mth 1.08 (0.76); 0.91 (0.84); 0.70 (0.67). One way ANOVA p=.0001. Post hoc tests: the change from baseline to 2 mth follow-up was statistically significant BSI- interpersonal sensitivity Mean (SD): Baseline 0.97 (0.79);2mth 0.85 (0.83); 6mth 0.79 (0.86); 12mth 0.71 (0.83) One-way ANOVA: not significant (p=0.3274) BSI-depression Mean (SD): baseline 1.39 (0.98); 2mth 1.00 (0.72); 6mth 0.74 (0.76); 12mth 0.59 (0.66). One way ANOVA p=.0001. Post hoc tests: the change from baseline to 2mth follow-up was statistically significant BSI-anxiety Mean (SD): Baseline 1.11 (0.93); 2mth 0.81 (0.73); 6mth 0.66 (0.71); 12mth 0.55 (0.49). One way ANOVA p=.0001. Post hoc tests: the change from baseline to 2mth follow-up was statistically significant BSI-hostility Mean (SD): Baseline 0.67 (0.72); 2mth 0.61 (0.67); 6mth 0.50 (0.67); 12mth 0.47 (0.73) One way ANOVA: not significant (p=.0267) BSI-somatisation Mean (SD): Baseline 0.58 (0.70); 2mth 0.49 (0.60); 6mth 0.32 (0.51); 12mth 0.37 (0.50)	

			One way ANOVA: not significant (p=0.367) BSI-phobic Mean (SD): Baseline 0.54 (0.73); 2mth 0.47 (0.64); 6mth 0.30 (0.46); 0.20 (0.42). One way ANOVA p=.0006. Post hoc tests: the change from 2 mth to 6 mth follow-up was statistically significant BSI-paranoid ideation Mean (SD): Baseline 0.87 (0.80); 2mth 0.86 (0.76); 6 mth 0.61 (0.72); 12 mth 0.40 (54). One way ANOVA p=.0001. Post hoc tests: the change from 2mth to 6mth follow-up was statistically significant BSI-psychoticism Mean (SD): Baseline 0.83 (0.72); 2mth 0.72 (0.70); 6mth 0.55 (0.63); 12mth 0.32 (0.47). One way ANOVA p=.0002. Post-hoc tests: the change from 6mth to 12mth follow-up was statistically significant SAS-work at home Mean (SD): Baseline 1.51 (1.27); 2mth 1.47 (1.23); 6mth 1.11 (1.06); 12 mth 0.94 (0.85) One way ANOVA: not significant (p=0.291) SAS-financial Mean (SD): Baseline 1.92 (1.28); 2mth 1.73 (1.01); 6mth 1.69 (1.33); 12mth 1.44 (0.57) One way ANOVA: not significant (p=0.586) SAS-family unit Mean (SD): Baseline 2.27 (1.09); 2mth 2.01 (0.72); 6mth 1.96 (0.96); 12mth 1.47 (0.78). One way ANOVA p=.0001. Post-hoc tests: Significant difference occurred between 6mth and 12 mth follow-up SAS-parental role Mean (SD): Baseline 1.04 (1.01); 2mths 1.23 (0.95); 6mths 1.18 (1.06); 12mths 1.01 (0.89) One way ANOVA: not significant (p=0.2323) SAS-family Mean (SD): Baseline 1.82 (0.47); 2mths 1.69 (0.49); 6 mths 1.76 (1.11); 12mths 1.48 (0.42)	

			One way ANOVA: not significant (p=0.727) SAS-spare time Mean (SD): Baseline 2.54 (0.65); 2mths 2.22 (0.50); 6mths 1.90 (0.91); 12mths 1.81 (0.64). One way ANOVA p=.0001. Post-hoc tests: Significant difference found between two mths and 6mths SAS-work as student Mean (SD): Baselne 0.14 (0.47); 2mth 0.14 (0.41); 6mth 0.12 (0.43); 12mth 0.20 (0.49) One way ANOVA: not significant (p=0.6086) SAS-work outside home Mean (SD): Baseline 1.55 (1.83); 2 mth 1.05 (1.05); 6mth 1.13 (1.08); 12 mth 1.16 (0.75) One way ANOVA: not significant (p=0.1746) SAS-total Mean (SD): Baseline 2.16 (0.54); 2mth 1.88 (0.37); 6mth 1.82 (0.55); 12mth 1.60 (0.44). One way ANOVA: p=.0001. Post hoc tests: Significant decrease occurred between baseline and 2mth follow-up	

Study details **Author** De Groot (2007)[40] **Title** Cognitive behaviour therapy to prevent complicated grief among relatives and spouses bereaved by suicide: cluster randomised controlled trial **Country** Netherlands **Study design** Cluster RCT **How were participants assigned** Families were randomly assigned using randomisation lists that were stratified by the age and sex of the deceased. An independent secretary administered randomisation and the numbers were concealed from the counsellors	**Participants** **Number of participants recruited** *Intervention:* n = 41 families (74 participants) *Comparison:* n = 33 families (60 participants) **Age groups participating** Adults and adolescents >15 years old **Ages** *Intervention:* Mean 43 (SD 13.7) *Comparison:* Mean 43 (SD 13.5) **Relationship to deceased** *Intervention:* spouse 31%; parent 31%; child 16%, sibling 18%, in-law/other 4% *Comparison:* spouse 28%; parent 15%; child 29%; sibling 17%; in-law/other 11% **Time since bereavement** *Intervention:* baseline measurement 2.5 months after the suicide *Comparison:* as above **Males** *Intervention:* n = 48 (41%) *Comparison:* n = 12 (22%) **Ethnicity** *Intervention:* not reported *Comparison:* not reported **Education** *Intervention:* high 36%; middle 33%; low 30% *Comparison:* high 43%; middle 34%; low 23% **Any other socioeconomic or cultural data**	**Intervention** **Setting** *Intervention*: family home *Comparison*: usual care settings **Family, group or individual intervention** *Intervention*: family *Comparison*: usual care **Professionally led or self-help** *Intervention*: professionally led *Comparison*: n/a **Description of intervention and comparison** *Intervention*: family-based grief counselling programme using cognitive behaviour therapy. The programme addressed the problems of the complete family system rather than individual participants. The programme aimed to provide a reference frame for grief reactions, engage emotional processing, enhance effective interaction and improve problem solving. Participants were provided with an information manual on suicide and bereavement, homework, a bibliography and a list of further sources of support. *Comparison*: usual care (no further information provided) **Description of delivery** *Intervention:* The content of the sessions was discussed with the family at the first session. Cognitive restructuring and consolidation of support were fixed topics provided in the first and second sessions. Optional topics were also provided. Each family was counselled by one nurse *Comparison:* n/a	**Results** **Number of participants lost to follow up** Intervention: 2 families (6 participants) Comparison: 2 families (6 participants) **Reasons for dropping out** *Intervention:* geographic objection n=2; removed n=2; unable to arrange sessions within timeframe n=2 *Comparison:* wanted to leave trouble behind n=2; untraceable n=1; reason unknown n=3 **Any differences between those who dropped out and those who didn't** The withdrawal group showed slightly more favourable mean baseline scores for depression, complicated grief and self blame compared to the group who completed (these differences were statistically significant) **Details of statistical analysis** Primary outcome: self-reported complicated grief (Inventory of Traumatic Grief) Secondary outcomes: Depression (Centre for Epidemiologic Studies Depression Scale (CESDS)); suicidal ideation (using four questions used in a prevalence study); perception of being to blame for the suicide (three questions using a Likert scale); Traumatic Grief Evaluation of Response to Loss (TRGR2L - a semi-structured questionnaire administered by trained nurses not involved in the counselling) The authors state that data were analysed on an intention to treat basis. t-tests were used for normally distributed continuous variables and x^2 for dichotomous variables. Analysis of covariance was used to compare between group follow-up scores adjusted for baseline differences in sex, having lived with the deceased, and closeness of relationship. The analyses were also adjusted for clustering of symptoms within families. The analysis of suicidal ideation and self-blame were also	**Comments** The study was powered to detect a difference of 0.6 SD in ITG scores (primary outcome) with 80% power and two-sided p value of 0.05 (based on a intracluster coefficient of 0.1 and mean cluster size of two) The analyses were adjusted to take into account the clustering of symptom scores in family groups

	In paid employment *Intervention:* 54% *Comparison:* 48% **Any other additional potential prognostic factors reported?** Duration of relationship (median years and range) *Intervention:* 29 (3-50) *Comparison:* 28 (1-58) Had lived with deceased *Intervention:* 47% *Comparison:* 30% Marital status *Intervention*: single 7%; divorced 7%; cohabiting/married 49%; widowed 34%; other 6% *Comparison:* single: 11%; divorced 13%; cohabiting/married 50%; widowed 26% **Were there any baseline differences between the groups?** A greater proportion of the intervention group was male and had lived with the deceased compared to the comparison group. There were also more parents and fewer children in the intervention group than the comparison group **How were the participants recruited?** Coroners reported suicide deaths to the research team who then contacted relevant GPs. Participants were recruited through GPs. Of 401 suicides in the area 275 were reported to the research team by the coroner. GPs were approached in relation to 236 suicides, 178 families	**Length of treatment** *Intervention:* Four two hour sessions were planned at 2-3 week intervals. The number of sessions attended ranged from 1 to 7 (median 4; 95% CI: 3.7, 4.2) *Comparison:* n/a **Length of follow-up** Thirteen months post bereavement (10.5 months post baseline) **Implemented by** *Intervention:* Two psychiatric nurses *Comparison:* n/a **Details of professional background** *Intervention:* Trained in cognitive behaviour therapy and with experience in dealing with a range of mental disorders and suicidal behaviour *Comparison:* n/a **Specific training to implement intervention** *Intervention:* Trained in cognitive behaviour therapy *Comparison:* n/a **Any further details** Other interventions received *Intervention:* 53% primary healthcare; 35% mental healthcare; 49% other kinds of health *Comparison:* 50% primary healthcare; 32% mental healthcare; 54% other kinds of help	adjusted for baseline depression scores. Responses on the suicidal and self-blame scales were dichotomised at the 80th percentile and sensitivity analysis using alternative cut-offs were used **Results** Outcome: Inventory of Traumatic Grief (possible score range 29 to 145, higher score greater risk of grief) *Intervention* (n=68): Mean 69.9 (SD 23.1) *Comparison* (n=54): Mean 66.5 (SD 23.8) Unadjusted mean difference (MD) -0.16 (95% CI: -5.51, 5.18); p=0.95) Adjusted MD -0.61 (95% CI: -6.05, 4.83), p=0.82 Outcome: TRGR2L (maladaptive grief was defined as at least one positive response from a number of questions on complicated grief symptoms scored for frequency 0 (never) to 4 (always) or intensity 1 (not at all) to 4 (extremely)) *Intervention* (n=67): Mean 15% *Comparison* (n=53): Mean 17% Unadjusted odds ratio (OR) 0.44 (95% CI: 0.18, 1.12); p=0.09 Adjusted OR: 0.39 (95% CI: 0.15, 1.01); p=0.056 Outcome: CESDS (possible score range 0 to 60) *Intervention* (n=68): mean 14.2 (SD 11.4) *Control* (n=54): 13.3 (SD 12.6) Unadjusted MD 3.09 (95% CI: -0.75, 6.93); p=0.11 Adjusted MD 1.97 (95% CI: -1.65, 5.60); p=0.28 Outcome: suicidal ideation *Intervention* (n=68): 18% *Comparison* (n=54): 17% Unadjusted OR 0.95 (95% CI: 0.31, 2.95) Adjusted OR 1.08 (95% CI: 0.33, 3.57); p=0.89 Outcome: perception of being to blame	

	were defined as eligible by the GP and 166 families were approached to take part. 73 families were randomised **Any information reported about the deceased?** Mean age *Intervention:* 44 (SD 17.1) *Comparison:* 46 (SD 15.2) Men *Intervention*: n=27 *(* 69%) *Comparison:* n=26 *(*84%) **Were there any inclusion/exclusion criteria?** First degree relatives more than 15 years old and spouses of people who had committed suicide between 1 September 1999 and 1 January 2002 were included. People not fluent in Dutch and/or in prison were excluded		*Intervention* (n=68): 15% *Comparison* (n=54): 22% Unadjusted OR0.32 (95% CI: 0.09, 1.08); p=0.7 Adjusted OR: 0.18 (95% CI: 0.05, 0.67); p=0.01	

Study details **Author** Farberow(1992)[38] **Title** The Los Angeles Survivors After Suicide Program: An evaluation **Country** US **Study design** Controlled study **How were participants assigned to groups?** The participants in the intervention group applied and completed the 8 session programme. The comparison group was made up of the first 22 individuals who returned the follow-up questionnaire who had already completed the baseline questionnaire but did not attend the sessions or dropped out after one	**Participants** **Number of participants recruited** *Intervention:* n = 60 *Comparison:* n = 22 **Age groups participating** Adults and children **Ages** *Intervention:* 10-19 years; 0% 20-29 years; 23% 30-39 years; 34% 40-49 years; 25% 50-59 years; 10% 60+ years; 8% Mean 40 years (estimate from graphs) *Comparison:* 10-19 years; 5% 20-29 years; 32% 30-39 years; 26% 20-29 years; 14% 50-59 years; 14% 60+ years; 9% Mean 37 years (estimate from graphs) **Relationship to deceased** *Intervention:* Mixed group - Sibling (35%),child (23%), parent (20%), spouse (13%), sweetheart (5%), other (10%) *Comparison:* Mixed group - Sibling (18%), child (18%), parent (27%), spouse (27%), sweetheart (14%), other (5%) (Three participants reported multiple losses by suicide) **Time since bereavement** *Intervention:* <3 months; 32% 3-5 months; 33% 6-8 months; 14%	**Interventions** **Setting** *Intervention:* Not stated - Based at a suicide prevention centre but further details not provided *Comparison:* Not applicable **Family, group or individual intervention** *Intervention:* Group *Comparison:* Not applicable **Professionally led or self-help** *Intervention:* Professionally-led *Comparison:* Not applicable **Description of intervention and comparison** *Intervention:* Survivors after suicide programme: Group therapy based on the underlying philosophy that suicide survivors are normal people subjected to huge emotional stress rather than psychiatrically ill people, who seek understanding of personal dynamics and resolution of diverse long-standing intrapsychic conflicts *Comparison:* No intervention - controls were those who completed a pre-program ("before") questionnaire, but then did not attend the sessions or dropped out after one session. Controls were contacted by letter, phone or both two months following completion of the pre-program questionnaire for responses to the "after" questionnaire. The first 22 respondents were then classified as the control group; 82% responded within 3 months, the remainder had responded within 6 months **Description of delivery** *Intervention:* Reading material from various books and articles was	**Results** **Number of participants lost to follow up** *Intervention:* No reports of any loss to follow-up but only individuals who completed the 8 sessions returned questionnaires were included. *Comparison:* No reports of any loss to follow-up but only individuals who returned baseline or 'before' questionnaires were included **Reasons for dropping out** *Intervention:* Not applicable *Comparison:* Not applicable Reasons given for not participating in the intervention were: location was too far away; found help elsewhere; cost (although stated that no one was excluded because of inability to pay) **Any differences between those who dropped out and those who didn't** *Intervention:* Not applicable *Comparison:* Not applicable **Details of statistical analysis** Participants were asked to estimate the level of intensity of the following emotions (high, moderate or low): depression; grief; anxiety; shame; guilt; anger at self or others; anger at deceased; puzzlement; own suicidal feelings at 3 time points: T1=within first 4 weeks after the suicide (retrospective); T2="before" programme; T3 = "after" programme (after 8 sessions or approx. 2 months after "before" questionnaire for the controls). Comparisons were made between the groups at T2 and T3 for each of the feelings and the changes between T2 and T3 within each group were examined. P-values were presented for some comparisons although no details of statistical tests employed were reported. Number of participants included in	**Comments** Unclear whether the intervention group suffered any drop-outs, and by definition the control group could not have suffered and loss to follow-up Data collection tools appear to be a set of questions devised for the study - not clearly reported whether valid or reliable No details were provided about the statistical analyses performed and only some p-values are provided. N.B. the results are reported as percentage of participants experiencing intensity of feeling - However do not all add up to 100% (sometimes over 100%) - "excess" percentages not accounted for Unclear when the participants reported on the other activities that they used to help them cope - i.e. were these activities ongoing throughout the intervention. It was unclear if the study was appropriately powered

	9-11 months; 0% 12-23 months; 2% 24+ months; 19% Mean 10.2mths (estimate from graphs) *Comparison:* <3 months; 8% 3-5 months; 50% 6-8 months; 17% 9-11 months; 5% 12-23 months; 5% 24+ months; 15% Mean 9.5 (estimate from graphs) **Males** *Intervention:* n = 18 *Comparison:* n = 5 **Ethnicity** *Intervention:* Not reported *Comparison:* Not reported **Education** *Intervention:* Not reported *Comparison:* Not reported **Any other socioeconomic or cultural data** None reported **Any other additional potential prognostic factors reported?** "Major life changes" since the suicide, change of residence (18% of intervention group and 32% of the comparisons), divorce (2 in the intervention group) and (re)marriage (4 in the intervention group). Both groups had also experienced other deaths (12% and 18%). Activities used by the participants in coping with the loss: group psychotherapy (22% int vs.24%comp); individual	distributed, along with suggested topics for group discussion. *Comparison:* Not applicable **Length of treatment** *Intervention:* Eight 1.5 hour sessions, once a week. Participants were invited to attend monthly meetings thereafter for as long as they wished. *Comparison:* Not applicable **Length of follow-up** 2 months **Implemented by** *Intervention:* Professional and volunteers *Comparison:* Not applicable **Details of professional background** *Intervention:* Sessions led by both a mental health professional and a trained survivor who had already been through the program. *Comparison:* Not applicable **Specific training to implement intervention** *Intervention:* Yes. The survivor volunteers received additional training (further details not provided). *Comparison*: Not applicable **Any further details** No.	analyses: intervention n=60; comparison n=22 **Results** Proportion of participants of participants reporting low (L) moderate (M) and high (H) intensity of each of the emotions Note: Two baseline measures were taken: the first was a retrospective measure where participants reported how they felt within one month of their bereavement and then just before the intervention commenced. The retrospective baseline data has not been extracted. Only the baseline data prior to commencing the intervention was extracted Anger (towards deceased) Baseline: *Intervention* H=18, M=35, L=45; *Comparison* H=23, M=18, L=59 Follow-up: *Intervention* H=10, M=23, L=67; *Comparison* H=18, M=23, L=59 Anger (towards self) Baseline: *Intervention* H=23, M=45, L=28; *Comparison* H=9, M=50, L=41 Follow-up: *Intervention* H=8, M=45, L=45; *Comparison* H=14, M=41, L=41 Anxiety Baseline: *Intervention* H=20, M=55, L=22; *Comparison* H 8, M=41, L=36 Follow-up: *Intervention* H=10, M=48, L=38; *Comparison* H=5, M=45, L=45 Depression Baseline: *Intervention* H=33, M=53, L=13; *Comparison* H=27, M=50, L=23 Follow-up: *Intervention* H=10, M=70, L=20; *Comparison* H=18, M=41, L=41 Grief Baseline: *Intervention* H=33, M=53, L=8; *Comparison* H=18, M=55, L=27 Follow-up: *Intervention* H=15, M=55, L=28;	

	psychotherapy(50% int vs. 46% comp); changing residence (10% int vs. 20%comp); rearranging belongings (33% int vs. 40% conp); visiting grave (40% int vs. 35%comp); work (40% int vs. 55% comp) ; reviewing pictures (55% int vs. 50% comp); talking with family/friends (85% int vs. 90% comp). Note: All data extrapolated from graphs **Were there any baseline differences between the groups?** Yes The authors state there were significant differences in kinship to the deceased between the two groups, though it was unclear whether the difference was statistically significant. There was a statistically significant difference between groups in the health of the participants since the suicide: 55% of each group stated that their health had remained the same, 33% of those in the intervention group and 41% in the comparison group stated health had got worse and 8% in the intervention group and 5% of the comparison group stated that health had become better (significance level not reported). Answers to the "before" questionnaire showed that feelings of grief, shame and guilt were significantly higher for those in the intervention than comparison group (% of participants reporting high and moderate rates of intensity combined): grief=86% vs. 73%, p<0.05; shame = 42% vs. 23%; guilt = 81% vs. 41%, p<0.01.		*Comparison* H=9, M=68, L=23 Guilt Baseline: *Intervention* H=18, M=63, L=13; *Comparison* H=9, M=32, L=19 Follow-up: Intervention H=5, M=35, L=53; *Comparison* H=14, M=32, L=55 (possible misprint – does not total 100%) Puzzlement Baseline: *Intervention* H=38, M=35, L=23; *Comparison* H=27, M=36, L=32 Follow-up: *Intervention* H=17, M=53, L=27; *Comparison* H=27, M=14, L=50 Shame Baseline: *Intervention* H=10, M=32, L=52; *Comparison* H=5, M=18, L=77 Follow-up: *Intervention* H=2, M=28, L=68; *Comparison* H=0, M=18, L=82 Suicidal ideation Baseline: *Intervention* H=2, M=16, L=82; *Comparison* H=9, M=5, L=86 Follow-up: *Intervention* H=0, M=10, L=90; *Comparison* H=5, M=4, L=92 Rating of the intervention: 92% stated the group had helped them; 56% rated it 7/7 (very beneficial) 24% gave 6/7; 10% rated 5/7 and 10% rated it 4/7. About half stated that there were too few sessions, 41% felt that the number of sessions was "just right". A total of 89% of participants stated that they would recommend the programme to others. Suggestions for possible improvements to the sessions included: more structure; more practical advice; more professional input; having a variety of losses in each group - rather than putting people with similar losses together - the details of this allocation was not reported	

	How were the participants recruited? Participants were recruited a mixture of self-referral (about 5% in each group), professional referral (around 10-15% in each group) suggestion from a friend (about 17-27% in each group) or other methods **Any information reported about the deceased?** No **Were there any inclusion/exclusion criteria?** It appears that only individuals who completed the course and completed the before and after questionnaires (for the intervention group) or who completed the before questionnaires but did not take part in the intervention (for the comparison group) were included			

Study details	Participants	Interventions	Results	Comments
Author Kovac (2000)[36] **Title** Writing projects: lessening undergraduates' unique suicidal bereavement **Country** US **Study design** RCT **How were participants assigned to groups?** The authors state randomised though details not provided	**Number of participants recruited** *Intervention:* n = 20 *Comparison:* n = 22 **Age groups participating** Adults **Ages** *Intervention:* Mean 23.16 (SD 6.99) years *Comparison:* Mean 25 (SD 7.98) years **Relationship to deceased** *Intervention:* Not reported *Comparison:* Not reported **Time since bereavement** *Intervention:* Mean 13.26 (SD 9.32) months *Comparison:* Mean 11.95 (SD 6.54) months **Males** *Intervention:* n = 5 *Comparison:* n = 3 **Ethnicity** *Intervention:* African American 5% (n=1), Caucasian 90% (n=17), Not stated 5% (n=1) *Comparison:* African American 9% (n=2), Caucasian 91% (n=19) **Education** *Intervention:* University undergraduates *Comparison:* University undergraduates **Any other socioeconomic or cultural data** None reported	**Setting** *Intervention:* Small lab room at a university *Comparison:* Small lab room at a university **Family, group or individual intervention** *Intervention:* Individual *Comparison:* Individual **Professionally led or self-help** *Intervention:* Self-help/support *Comparison:* Self-help/support **Description of treatment** *Intervention:* PWC Participants were given the same writing instructions each day which asked them to write about the events and emotions around their loss, particularly issues that they had not widely discussed with others. They were asked to explore their deepest emotions in relation to their loss (this was intended to be similar to Pennebaker (1989)). They were asked to try and write continuously for the 15 minutes, repeating themselves or trying to get more detailed if they ran out of things to write *Comparison:* TWC Participants were given different writing instructions each day which asked them to describe their bedroom as precisely and objectively as possible, what they had eaten that day, what they had done that day, what they planned to do that day etc. They were asked to avoid mentioning their emotions, feelings or opinions. They were asked to try and write continuously for the 15 minutes, repeating themselves or trying to get more detailed if the ran out of things to	**Number of participants lost to follow up** *Intervention:* n=5 *Comparison:* n=7 **Reasons for dropping out** *Intervention:* One participant dropped out of the PWC group immediately following the intervention and 4 did not complete the outcome assessment at 8 weeks (reasons not reported). *Comparison:* One participant dropped out of the TWC group immediately following the intervention and 6 did not complete the outcome assessment at 8 weeks (reasons not reported) **Any differences between those who dropped out and those who didn't** The authors state there were no significant baseline differences between those who completed follow-up and those who did not (details not reported) **Details of statistical analysis** Repeated measures analysis of variance and Tukey post-hoc test were used. Number of participants in the analysis: *intervention*: n=15 *comparison:* n=15 **Results** GEQ total: Mean (SD) *PWC*: Baseline 109.86 (37.24); 2wks 108.00 (35.79); 8wks 90.29 (25.56). *TWC:* Baseline 122.57 (29.01); 2wks 109.36 (25.16); 8wks 106.14 (27.54). There was a significant time effect and interaction ($p<0.001$) Post-hoc tests: PWC lower score than TWC at baseline & 8wks GEQ-Unique : Mean (SD) *PWC:* Baseline 109.86 (SD 37.24); 2wks 108.0 (SD 35.79); 8wks 90.29 (SD 25.56). *TWC:* Baseline 122.57 (SD 29.01); 2wks	Dropout rates were similar across groups but reasons not reported Appropriateness of the statistical analysis: problem of small sample, lots of post-hoc tests Researcher who provided encouragement before each session was blinded to group allocation College student sample - issue of generalisability. Also predominantly female Possibility of self-selection bias - more likely that those dealing less well with their loss did not participate? Limited number of potential prognostic criteria investigated It was unclear if the study was appropriately powered

	Any other additional potential prognostic factors reported? No **Were there any baseline differences between the groups?** There was a statistically significant difference (p=.046) in closeness to loved one (for those completing the pre and post measures only): the mean score for the PWC group indicated a closer relationship. The PWC group had a lower score (less severe) at baseline on GEQ-total than the TWC group **How were the participants recruited?** Recruited by researcher **Any information reported about the deceased?** *Intervention:* Age of deceased: Mean 34.63 (SD 13.65) Closeness of participant to deceased: Mean 2.44 (SD 0.98) Upset by death: Mean 1.79 (SD 0.98) *Comparison:* Age of deceased: Mean 28.90 (SD 10.84) Closeness of participant to deceased: Mean 1.86 (SD 0.79) Upset by death: Mean 1.48 (SD 0.87) **Were there any inclusion/exclusion criteria?** University undergraduates who had lost a loved one by suicide in	say **Description of delivery** *Intervention*: Each day, participants received the same writing instructions verbally and in writing. Participants were asked not to discuss their topics with other people in their class as different people were writing about different topics. Writing took place in a small lab room with no other participants present. One researcher, blinded to group allocation met with participants for a few minutes after session 2 and 3 to assess how the writing was going and to encourage the participant to "get into their writing as much as possible" because the writing was an integral part of the study. Participants were provided with the contact details of counselling services on campus and in the area. *Comparison*: As for profound writing condition **Length of treatment** *Intervention:* 2 weeks of four sessions lasting 15 minutes *Comparison:* 2 weeks of four sessions lasting 15 minutes **Length of follow-up** *Intervention:* 2 and 8 weeks following commencement of study *Comparison:* 2 and 8 weeks following commencement of study **Implemented by** *Intervention:* Researcher *Comparison:* Researcher **Details of professional background** *Intervention:* None stated *Comparison:* None stated	109.36 (SD 25.16), 8wks 106.14 (SD 27.54). There was a significant time effect (p<.002). Posthoc tests: there was a significant decrease from baseline to 8 wks and 2wks to 8 wks. There were no statistically significant changes on any of the other GEQ subscales. GRQ: Mean (SD) *PWC*: Baseline 36.20 (14.87); 2wks 32.80 (16.56); 8wks 29.00 (14.92). *TWC:* Baseline 45.73 (12.05); 2wks 36.33 (13.82); 38.00 (14.73). There was a significant time effect (p<0.001) and significant interaction (p<.046). Posthoc tests: TWC higher grief score at baseline. There was a significant improvement from baseline to 2 wks and 2wks to eight weeks. Self-reported non-routine healthcare visits: Mean (SD) *PWC:* Baseline 0.33 (0.62); 8wks 0.33 (0.72). *TWC:* Baseline 0.38 (0.77); 8wks 1.54 (2.88) (not statistically significant). Differences remained non significant following trimming, log linear transformations and weighting extreme scores. IES-total: Mean (SD) *PWC:* Baseline 27.60 (17.67); 2wks 25.40 (19.13); 8wks 19.87 (19.66). *TWC:* Baseline 31.93 (15.60); 2wks 28.20 (21.19); 8wks 20.93 (15.45). There was a significant time effect (p<.001). Post-hoc tests: significant improvement from baseline to 8wks and 2 wks to 8wks. IES-avoidance: Mean (SD) *PWC:* Baseline 14.27 (12.58); 2wks 12.60 (11.46); 10.60 (12.93). *TWC:* Baseline 15.13 (7.35) 2wks 15.47 (13.66); 8wks 10.73 (9.29). There was a	

	the previous two years, who were close to the deceased and who were upset by the death. Closeness and level of upset were assessed using a 5-point likert scale (1=very close/upset to 5=not close/upset at all): students who reported a score of 1, 2, or 3 were eligible for inclusion. Approximately 2,400 undergraduates were screened in class and 2% (n=53) met the inclusion criteria: of these 42 (79%) agreed to participate	**Specific training to implement intervention** *Intervention:* No *Comparison:* No **Any further details** Undergraduates who took part in the project received extra course credits Baseline demographic data reported refers to those who completed pre- and post-test (2wks).Baseline data were not reported for the two participants who dropped out before completing the post-intervention outcome measures	significant time effect (p<.007). Posthoc tests: There was a significant improvement from baseline to 2 wks and 2wks to eight weeks IES-intrusion: Mean(SD) *PWC:* Baseline 13.53 (8.10); 2wks 12.80 (8.98); 8wks 9.27 (7.84). *TWC:* 16.80 (10.12); 2wks 12.67 (9.90); 8wks 10.20 (8.55). There was a significant time effect (p<.001). Posthoc tests: There was a significant improvement from baseline to 2wks and 2wks to 8wks The essay writing experience: At the end of each session participants were asked to rate their level of anxiety (0=absolutely calm to 100=worst anxiety ever experienced. They also rated 8 items on a 7-point Likert scale (1=not at all to 7 = a great deal): how much their essays were personal, meaningful, severe, revealing of emotions, how much they talked to others, actively held back from talking to others about their essays, how much their essays were still affecting their lives. On all 4 days the PWC group reported their essays were more personal, more meaningful, more revealing of their emotions, more severe, they wanted to talk about their essays more, talked about their essays more and held back from talking about their essays more that the TWC group (p<.001)	

Study details **Author** Pfeffer (2002)[37] **Title** Group intervention for children bereaved by the suicide of a relative **Country** US **Study design** RCT **How were participants assigned to groups?** Families were assigned in alternating order to receive the intervention. If there was more than one months wait to have enough families to make up a therapy group the next eligible family was assigned to the intervention group to avoid delay	**Participants** **Number of participants recruited** *Intervention:* n = 39 (from 27 families) *Comparison:* n = 36 (from 25 families) **Age groups participating** Adults and children **Ages** *Intervention:* Mean 9.6 (SD 2.9) years *Comparison:* Mean 11.4 (SD 3.5) years **Relationship to deceased** *Intervention:* Mixed group 18 (75%) of families (23 children) retained in the study experienced the loss of a parent *Comparison:* Mixed group 4 (80%) of families (8 children) retained had experienced the loss of a parent Note: Relationship to the deceased was reported only for participants who did not drop out of the study **Time since bereavement** *Intervention:* Mean 10.2(12.5) months *Comparison:* Mean 17.2(33.6) months **Males** *Intervention:* n = 16 *Comparison:* n = 13 **Ethnicity** *Intervention:* African American 18% (n=7), Caucasian 71% (n=28), Hispanic 10% (n=4) *Comparison:* African American 14% (n=5), Caucasian 67% (n=24),	**Interventions** **Setting** *Intervention:* Not reported *Comparison:* Not reported **Family, group or individual intervention** *Intervention:* Group *Comparison:* Not applicable **Professionally led or self-help** *Intervention:* Professionally-led *Comparison:* Not applicable **Description of treatment** *Intervention:* Bereavement Group Intervention (BGI): The main themes of the intervention focused on children's understanding of and responses to the death of a parent or sibling, unique features of suicide and loss of personal and environmental resources. The intervention comprised of (1) psychoeducational components: discussing children's concepts of death and its permanence; identifying feelings of grief; defining suicide; discussing why people commit suicide; discussion prevention of children's suicidal urges; enhancing children's skills in problem solving and (2) supportive components: facilitating children's expressions of grief and their identification with positive attributes of the deceased but avoidance of suicidal urges and hopelessness. it was based on theoretical models of attachment (Bowlby, 1980), responses to loss (Ness & Pfeffer, 1990; Parks 1996; Stroebe et al, 1993) and cognitive coping (Lazarus & Folkman,	**Results** **Number of participants lost to follow up** *Intervention:* n=7 children (from 3 families) *Comparison:* n=27 children (from 20 families) **Reasons for dropping out** *Intervention*: Dropout occurred after initial assessment whilst waiting to begin intervention. Difficulty keeping the appointments (55%), did not want to talk about the death (45%). *Comparison*: Families too busy to schedule appointments (60%), did not want to talk about the loss (20%), sought intervention elsewhere (20%). Dropout was significantly higher in comparison group than intervention group ($p<0.0001$) **Any differences between those who dropped out and those who didn't** *Intervention:* Not reported *Comparison:* Not reported **Details of statistical analysis** Fisher exact tests and t-tests were used to compare the baseline characteristics of the two treatment groups. Outcome variables to evaluate the efficacy of the intervention were: anxiety (RCMAS); depression (CDI); posttraumatic stress (CPTSRI); social adjustment (SAICA); parents' depression (BDI). The mean difference between measurements T1 and T2 (approx. 12 weeks apart) was used to indicate intervention efficacy using ANCOVA. Two other measurements were calculated: (T2-T1)/T1 = change relative to initial T1 score; or (T2-T1)/time between assessments = indicator of rate of change per unit time. Multiple children families were controlled using mixed	**Comments** Completion rates: *intervention* = 82%; *comparison* = 25% Drop-out rates clearly different across the two groups - much greater loss to follow-up in the no intervention group ANCOVA analysis inappropriate -due to small sample size in control group Participants in the no intervention group were permitted to seek alternative therapy - 20% sought the intervention elsewhere and this was cited as a reason for drop-out, thus potentially contaminating the results

	Hispanic 19% (n=7) **Education** *Intervention:* Not reported *Comparison:* Not reported **Any other socioeconomic or cultural data** Social class *Intervention:* I=6 (15.4%); II=11 (28.2%); III=15 (38.5%); IV=6 (15.4%); V=1 (2.5%) *Comparison:* I=5 (13.9%); II=6 (16.7%); III=12 (33.3%); IV=7 (19.4%); V=6 (16.7%) **Any other additional potential prognostic factors reported?** Baseline psychosocial data for intervention group vs. comparison group (mean(SD)): RCMAS: 49.5 (9.6) vs. 51 (10.1) CDI: 46.8 (8.9) vs. 51.7 (13.1) CPSD: 25.3 (12.2) vs. 28.9 (13.6) SAICA: 1.5 (0.2) vs. 1.7 (0.3) BDI (parent depression): 14.7 (8.3) vs. 15.4 (12.0) **Were there any baseline differences between the groups?** Yes. Children assigned to receive the intervention and were younger than those assigned to no intervention ($p<0.02$). Children assigned to the intervention had better initial social adjustment than those in the comparison group ($p<0.005$) Baseline characteristics for the two groups were also reported for only the participants who completed the study: for those who completed the study participants in the intervention group were significantly younger than children in the non intervention group (9.8yrs (SD 3.0) vs 12.2 yrs (3.3) Children retained to the intervention	1984). Parents were helped to understand childhood bereavement, foster children's expressions of grief, discuss the suicide, identify children's morbid reactions, and promote children's emotional and social functioning. Support was provided for parents to ventilate grief. The intervention was documented in an intervention manual (available from the primary author). Other interventions were not received. The intervention was offered separately but simultaneously to parents. *Comparison:* Did not receive the intervention. Were permitted to seek and receive other interventions from elsewhere, such as pastoral or school counselling or individual psychotherapy. **Description of delivery** *Intervention:* Groups of 2-5 children, grouped by age (6-9 yrs,10-12 yrs,13-15 yrs). Siblings were in groups together unless problems identified in discussing concerns in the presence of siblings. Weekly supervision of group leaders and intervention sessions videotaped and rated for adherence to the manual using the therapist performance scale (adequate interrater reliability and internal consistency reported) by a trained evaluator. Inadequate adherence was addressed through discussion with group leaders. All the group leaders were classified as adhering to the manual for each intervention session *Comparison:* Not applicable	effects models. Confounders were defined as variables significantly associated with T1 scores or if the variable at T1 was significantly different between intervention groups. Repeated measures multiple ANOVA performed to assess change over time within groups controlling for initial T1 scores, age and time between T1 and T2. **Results** Baseline and follow-up data (mean (SD)) refer to participants who were retained in the study). The ANCOVA analyses, adjusted for baseline values, age and time to follow-up though it is unclear whether or not the extracted data are adjusted or unadjusted. RCMAS Baseline: *Intervention* (n=31) = 49.3 (9.9); *Comparison* (n=8)=52.6 (6.5). Follow-up: *Intervention* (n=30) =39.6(10.6); *Comparison* (n=6)= 56.5(10.2), $p\leq0.001$ (greater reduction for children who received the intervention). CDI Baseline: *Intervention* (n=32) = 46.5 (8.7); *Comparison* (n=9) = 53.7 (11.8). Follow-up: *Intervention* (n=31) = 44.1(8.7); *Comparison* (n=8) = 53.9(7.8), $p\leq0.006$ CPSRI Baseline: *Intervention* (n=31) = 25.1 (12.4); *Comparison* (n=9) = 22.1 (7.0). Follow-up: *Intervention* (n=31) = 19.6 (11.4); *Comparison* (n=8) = 17.8 (9.1), not significant SAICA Baseline: *Intervention* (n=32) = 1.5 (0.3); *Comparison* (n=9) = 1.9 (0.4). Follow-up: *Intervention* (n=32) = 1.6(0.2); *Comparison* (n=9) = 1.8(0.4), not significant	

	group had lower depression scores compared to the comparison group (46.5 (8.7) vs. 53.7 (11.8), p<0.05) and better social adjustment (1.5 (0.3) v. 1.9 (0.4),p<0.05) **How were the participants recruited?** Recruited by researcher **Any information reported about the deceased?** For both groups combined the method of suicide was gunshot (37%); hanging (27%); overdose (12%); jumping (10%); other (14%). None of the children witnessed the suicides **Were there any inclusion/exclusion criteria?** Children aged 6 to 15 from families identified through the medical examiners' lists of suicide victims from January 1996 to November 1999 were eligible. They had to be English-speaking, with no "clinically estimated mental retardation", with a participating parent/caretaker and they had to know that the cause of death was suicide. Children with current psychiatric disorders were excluded (as assessed by the schedule for affective disorders and schizophrenia for school-age children-present state)	**Length of treatment** *Intervention:* Ten 1.5 hour group sessions weekly to bereaved children from 2 to 5 families. *Comparison:* Took part in the final assessment and received bimonthly telephone calls to maintain contact **Length of follow-up** 3 months (Length of follow-up ranged from 2.5 to 4.5 months from baseline) **Implemented by** *Intervention:* Professional *Comparison:* Not applicable **Details of professional background** *Intervention:* Masters-level psychologists *Comparison:* Not applicable **Specific training to implement intervention** *Intervention:* Interviewers were trained by the primary author of the paper which included extensive review of the intervention manual. *Comparison:* Not reported **Any further details** The intervention manual was reviewed by two child and adolescent psychiatrists and two psychologists prior to the study. It was piloted twice with three families	BDI (parents) Baseline: *Intervention* (n=32) = 14.6 (8.7); *Comparison* (n=8) = 14.9 (9.9). Follow-up: *Intervention* (n=32) = 11.1(10.5); *Comparison* (n=7) = 9.7(4.5), not significant	

Study details	Participants	Interventions	Results	Comments
Author Poijula (2001)[33] **Title** Reactions to adolescent suicide and crisis intervention in three secondary schools **Country** Finland **Study design** Observational study with a control group **How were participants assigned to groups?** Based on school children were attending. Unclear whether all classmates were selected	**Number of participants recruited** *School A:* n = 31 *School B:* n = 32 *School C:* n = 26 **Age groups participating** Children **Ages** *Total:* Mean 15.4 (SD 0.5), Range 14-17 years Not available for individual groups **Relationship to deceased** *School A:* Mixed group Class mates - a mixture of friends and not friends *School B:* Mixed group Class mates - a mixture of friends and not friends *School C:* Mixed group Class mates - a mixture of friends and not friends **Time since bereavement** *School A:* Range 0.03-0.06 months *School B:* Range 0.03-0.21 months *School C:* Range 0.03-0.06 months **Males** *School A:* n = 15 *School B:* n = 15 *School C:* n = 16 **Ethnicity** Not reported **Education** Secondary/high school students **Any other socioeconomic or**	**Setting** School setting **Family, group or individual intervention** Group **Professionally led or self-help** Professionally-led **Description of treatment** *School A:* No contingency plan. No crisis intervention after the first two suicides and 'adequate' intervention after third suicide. After the third suicide an 'adequate' crisis intervention was put into place comprising of a FTT and PD. *School B:* Contingency plan in place. 'Adequate' intervention after second suicide After first suicide, there was not FTT, classroom meetings (adapted version of PD) were organised in most classes (except one 8th grade class). After the second suicide, a FTT and PD were conducted *School C:* No contingency plan in place. 'Adequate' intervention after single suicide After the suicide a FTT and PD were conducted **Description of delivery** The interventions appear to have been administered in class groups - although this isn't explicit The first author met with three local psychologists for 2 hours and gave instructions on administering the inventories. Inventories were administered during one lesson period in each class	**Number of participants lost to follow up** *Total:* n=2 (Not stated which schools the two students were from) **Reasons for dropping out** *Total:* Two students who did not participate were absent from school on the day that the inventories were administered **Any differences between those who dropped out and those who didn't** Not reported **Details of statistical analysis** Questionnaires were administered on one day in May 1996 **Results** HSIB (comparison of schools): Number of students in high intensity grief group was highest in *school A:* 25% compared to *school B:* 5% and *school C:* no evidence of such grief (p=0.02) HSIB (intervention compared to no intervention): Received an intervention (n=43):9.3% were in high risk group for intense grief compared to 90.7% in low risk group Did not receive an intervention (n=18): 11.1% were in the high risk group for intense grief, 88.9% in low risk group (not significant) IES (comparison of schools): Fewer students defined as being at high risk for PTSD in *school C*: 15.4% compared to *school A:* 24.1% and *school B:* 25% (not	Participants were the homeroom class classmates of the suicide victims. The interventions were contingency plans initiated by the schools. It is not clear how the participants were recruited Authors report there was no reliability and validity data for the inventory reported by Dyregrov (1999). Results for this inventory don't appear to have been reported Only gender was reported (as an important confounders), but not for each school separately No a priori definition of an 'adequate' intervention or how "intervention vs. no intervention" was been defined. All of the schools had some type of intervention prior to data outcome assessment. The trauma of multiple suicides in the two of the schools with 'inadequate' interventions may have confounded the results Maximum time since bereavement refers to the number of days after the suicide that the interventions took place It was unclear if the study was appropriately powered

	cultural data Nothing reported **Any other additional potential prognostic factors reported?** No **Were there any baseline differences between the groups?** Unclear **How were the participants recruited?** Not reported **Any information reported about the deceased?** *School A:* Suicide 1 - August 1995,17 yr old male, ex-secondary school student by self-immolation in schoolyard; suicide2 - September 1995, 15 yr old male, 9th grade, by firearm (friend of first suicide victim); suicide 3 - January 1996, 15 yr old male, 9th grade by firearm. (friend of second suicide victim) *School B:* suicide 1 - August 1995, 14 yr old female by firearm; suicide 2: October 1995, 14 yr old male by firearm (acquaintance of first suicide victim) *School C:* suicide 1 - January 1996, 13 yr old male by firearm **Were there any inclusion/exclusion criteria?** Participants were classmates of the children who had committed suicide	**Length of treatment** *School A:* FTT held during the first day after the suicide and PD (2 hours) was conducted the following day *School B:* After first suicide, intervention (1 hour) given "late" - one week after the suicide (table says 4 days). After second suicide, FTT held first day after suicide and PD (1 hour) conducted four days (table says 1 week) after the suicide.("adequately timed") *School C:* FTT held first day after the suicide, PD (1 hour) conducted 2 days after the suicide **Length of follow-up** 4 to 9 months **Implemented by** *School A:* Professional *School B:* School staff and professional *School C:* Professional **Details of professional background** *School A:* Intervention organised and conducted by a trained mental health professional (clinical psychologist) *School B:* After first suicide the intervention was conducted by a teacher. After second suicide, the intervention was led by trained mental health professionals *School C:* mental health professional **Specific training to implement intervention** No reported **Any further details** Questionnaires were administered on one day in May 1996	significant) IES (overall effect of intervention): Received an intervention (n=55):21.8% were in high risk group for PTSD compared to 78.2% in low risk group. Did not receive an intervention (n=32): 21.9% were in the high risk group for PTSD, 78.1% in low risk group Subjective evaluation of the interventions (not reported separately by school, but by intensity of grief or PTSD): Rated the intervention as good (n=52):21.2% were in high risk group for PTSD compared to 78.8% in low risk group Rated the intervention as poor (n=26): 30.8% were in the high risk group for PTSD, 69.2% in low risk group Rated the intervention as good (n=39):2.6% were in high risk group for intense grief compared to 97.4% in low risk group Rated the intervention as poor (n=18): 27.8% were in the high risk group for intense grief, 72.2% in low risk group	

Study details	Participants	Interventions	Results	Comments
Author Seguin (2004)[39] **Title** Evaluation de programmes de postvention *-Evaluation of four suicide bereavement programs* **Country** Canada **Study design** Observational study with control groups **How were participants assigned to groups?** It is not clear exactly how participants were assigned to each group – although it appears that participants may have chosen the intervention based on geographical location Translated from French	**Number of participants recruited** *2 month group:* n = 25 (24 at T1) *4 month group:* n = 18 *6 month group:* n = 15 *12 month group:* n = 16 **Age groups participating** Adults (except 6 month group: all ages eligible) **Ages** *2 month group:* Mean 41 *4 month group:* Mean 42 *6 month group:* Mean 40 *12 month group*: Mean 42 **Relationship to deceased** *2 month group:* Mixed group-Partner(5),Mother (7), sister (6), child (4), friend (3) *4 month group*: Mixed group-Partner(6),Mother (4), sister (3), child (3), other (2) *6 month group:* Mixed group-Partner(4),father(3), Mother (3), sister (1), brother (1), friend (3) *12 month group:* Mixed group-Partner(3),Mother (5), father (4), sister (2), others (2) **Time since bereavement** *2 month group:* Mean 10-11 months Range 1-120 months *4 month group:* Mean 5 months Range 1-20 months *6 month group:* Mean 6 months Range 1-16 months *12 month group:*	**Setting** Centres of Prevention of Suicide (CPS)- *2 month group:* Quebec *4 month group:* Montreal *6 month group:* Centre Inter-Section en Outaouais *12 month group:* Haut-Richelieu **Family, group or individual intervention** Group **Professionally led or self-help** Professionally-led **Description of treatment** The aims of the four treatment programmes were generally the same, although not identical. They mainly attempted to offer a place to express pain, compare experiences, teach new adaptation strategies, overcome isolation, express emotions, understand reactions, regain a sense of life and work through bereavement The main difference between the interventions was the length of treatment: 2 months; 4 months; 6 months or 12 months The 12 month group also aimed to allow the survivors to become a source of support for one another Number of participants in each (closed) group session *2 month group:* 5-8	**Number of participants lost to follow up** Participation in the evaluations varied: the proportion of participants retained at T4 compared to baseline were: *2 month group:* 52% *4 month group:* 39% *6 month group:* 7% *12 month group:* 31% **Reasons for dropping out** No reasons reported – acknowledged by the authors as a problem **Any differences between those who dropped out and those who didn't** No details reported **Details of statistical analysis** The main outcomes were depression (BDI) and grief (Tessier Scale of Grief) No details about any statistical tests were reported **Results** Beck Depression Inventory: Scores were defined as mild depression (11-16); moderate depression (17-26); severe depression (26+) *2 month group:* T1(n=24):Mean 15 (variance 9.37) T2(n=15):Mean 14.13 (variance 8.84) T3(n=15):Mean 13 (variance 11.74) T4(n=13):Mean 11.62 (variance 11.47) *4 month group:* T1(n=18):Mean 20.67 (variance 9.95) T2(n=14):Mean 14.21 (variance 10.42) T3(n=11):Mean 9 (variance 6.86) T4(n=7):Mean 8.71 (variance 7.04) *6 month group:* T1(n=15):Mean 17.73 (variance 11.44)	The results may have two typographical errors; the mean grief scores at T1 and T2 for the 4 month group. These values fall outside of the range of scores (24-155) on the Tessier scale The numbers of participants in each group is very small and loss to follow-up varied, but on average was rather high. It was unclear if the study was appropriately powered No control group/non-intervention group The authors acknowledge the main problems with the study There were minor inconsistencies within the text and the tables – have assumed that écart means range or variance where appropriate The study was supported financially by the Collectif recherché et d'intervention sur le suicide et l'euthanasie supported by the Conseil Québecois de la Recherche Sociale (CQRS) The complexity of these interventions is such that one cannot be sure that the only difference is treatment duration

	Mean 14 months Range 3-71 months **Males** *2 month group:* n=4 *4 month group:* n=3 *6 month group:* n=4 *12 month group:* n=5 **Ethnicity** Not reported **Education** The authors stated that the majority of participants had completed college or university **Any other socioeconomic or cultural data** The authors stated that in general, the participants had a higher education and income than average **Any other additional potential prognostic factors reported?** "Traumatic circumstances"-it is not clear who and what this exactly refers to from the report *2 month group:* Lots(n=10),moderate(n=3),A little(n=6),little or none (n=4) *4 month group:* Lots(n=8),moderate(n=0),A little(n=2),little or none (n=8) *6 month group:* Lots(n=4),moderate(n=1),A little(n=7),little or none (n=3) *12 month group:* Lots(n=6),moderate(n=7),A little(n=1),little or none (n=0) Bereaved persons anticipation of suicide- *2 month group:*	*4 month group*: 8-10 *6 month group:* 4-10 *12 month group:* 8-10 **Description of delivery** All of the groups had set themes for the sessions. All of the groups started with the participants introducing themselves. Participants then went on to discuss various feelings such as: loss; attempt to understand emotions; to 'draw a line'; to discuss anger, guilt, emotions, shock. **Length of treatment** *2 month group*: Eight 2.5 hour weekly sessions plus one session of follow-up, 1 month after the sessions had finished *4 month group:* Eight 2 hour fortnightly sessions plus 3 follow-up sessions that took place 2 months, 4 months and 8 months after the end of the sessions. *6 month group:* Eleven 3 hour fortnightly sessions plus 1 follow-up session that took place 8 weeks after the end of the sessions. Participants were also invited to attend an annual commemoration. *12 month group:* Seventeen 2.5 hour sessions that were distributed throughout the course of the year. Follow-up was included in the programme, a post-programme service was also offered on a voluntary basis, whereby survivors can take part in open 'self-help' meetings which are held once a month and led by suicide survivors. **Length of follow-up**	T2(n=7):Mean 7 (variance 3.21) T3(n=3):Mean 6.33 (variance 5.51) T4(n=1):Mean 0 (variance 0) *12 month group:* T1(n=16):Mean 21 (variance 9.42) T2(n=14):Mean 19.14 (variance 12.10) T3(n=8):Mean 17 (variance 13.07) T4(n=5):Mean 13.6 (variance 12.01) Tessier Scale of Grief: Scores in the original study by Tessier (n=358)- mean 79 (SD 29), range 24-155 in original study. *2 month group:* T1(n=24):Mean 69.08 (variance 17.65) T2(n=15):Mean 64.8 (variance 21.41) T3(n=16):Mean 69.75 (variance 22.13) T4(n=13):Mean 73.69 (variance 27.04) *4 month group:* T1(n=18):Mean 3.22 (variance 17.09) T2(n=14):Mean 8.43 (variance 21.64) T3(n=11):Mean 70.27 (variance 18.38) T4(n=7):Mean 64.29 (variance 5.12) *6 month group:* T1(n=15):Mean 68.53 (variance 15.51) T2(n=7):Mean 92.43 (variance 10.15) T3(n=3):Mean 92 (variance 26.21) T4(n=1):Mean 109 (variance 0) *12 month group:* T1(n=16):Mean 63.38 (variance 17.64) T2(n=14):Mean 69.50 (variance 13.87) T3(n=8):Mean 66 (variance 17.57) T4(n=5):Mean 78.20 (variance 11.67) No formal statistical tests were performed, and the results were discussed narratively. It was noted that the levels of grief remained generally stable over time for each of the groups, whereas the depression scores	

	High(n=2),moderate(n=9),low (n=6),little or none (n=8) *4 month group:* High(n=0),moderate(n=5), low (n=3),little or none (n=10) *6 month group:* High(n=0),moderate(n=2),low (n=7),little or none (n=6) *12 month group:* High(n=0),moderate(n=1),low (n=3),little or none (n=10) Length of relationship with deceased (years)- *2 month group:* mean 23, range 4-41 *4 month group:* mean 26, range 3-51 *6 month group:* mean 15, range 1-41 *12 month group:* mean 22, range 7-35 The psychopathology (information on childhood, previous psychopathological problems) of the participants was also evaluated (using questions from the epidemiological study, Santé Quebec). In general, the problems reported the most were depression, substance abuse, anxiety and schizophrenia in some cases. It was also reported that between 6 and 13% of participants had lived away from their families for periods of 6 months to 16 years **Were there any baseline differences between the groups?** It was reported that "despite the variations [in family history] between the groups, the data suggest that there are more similarities than differences between the participants of the groups". The number of participants with reported mental health problems is highest in the 4 month group and lowest in the 12 month group. As for loss in childhood, the data do not allow the identification of any real differences	Outcomes were measured at 4 different times (over a period which could last over 2 years): baseline (pre-group); immediately after the last support group meeting (post-group); 6 months after the end of the sessions and 12 months after the end of the sessions **Implemented by** All of the groups were led and facilitated by health professionals (psychologists/nurses etc.) Number of leaders- *2 month group:* 2 *4 month group:* 2 *6 month group:* 1 or 2 *12 month group:* 2 **Details of professional background** No further details reported **Specific training to implement intervention** Nothing reported **Any further details** No	diminished for each group over time The authors conclude that perhaps the 2 month programme is too short to have a realistic effect, and the programme of 12 months is too long. Programmes of an intermediate length, such as the 4 and 6 month programmes may be more effective However, further research, with more accurate means of measurement and semi-structured interviews, using a control group, is required	

	between the groups **How were the participants recruited?** Self referral to the centre; since the end of the 1980s, the programmes were known through the local communities, and generally the coroners or police inform suicide survivors 2 month group were recruited in 4 groups; 4 month group were recruited in 3 groups; 6 and 12 month groups recruited in 2 groups **Any information reported about the deceased?** Method of suicide-*2 month group:* hanging (13), fire-arms (4), overdose (3), other (1) *4 month group:* hanging (9), fire-arms (3), overdose (3), drowning (2), fall (1) *6 month group:* hanging (10), fire-arms (2), overdose (2), fall (1) *12 month group:* hanging (3), fire-arms (5), overdose (6), drowning (1), fall (1) Age of the deceased (years)- *2 month group:* mean 34, range 18-59 *4 month group:* mean 40, range 13-67 *6 month group:* mean 30, range 18-65 *12 month group:* mean 27, range 13-51 **Were there any inclusion/exclusion criteria?** Those who were accepted to participate were those bereaved by suicide, receiving the services of a CPS			

APPENDIX E: STUDIES DESCRIBING AN INTERVENTION

(a) Evaluative studies

Study reference	Country	Setting	Participants	Intervention	Delivered by
Battle, 1984[61] Survey	USA	Crisis intervention centre	Callers to the crisis intervention centre	Survivors of Suicide Group An open group meeting weekly for 1.5 hours for 4 months and then fortnightly, at the suggestion of group members. The aim was to help survivors understand the psychodynamics of suicide, the motivations of the deceased, their relationship with the deceased and any unresolved problems	Unclear
Hazell, 1993[89, 93] Observational	Australia	School	Peers	Group counselling Within 7 days of a student suicide, a 90 minute counselling was provided to groups of 20-30 students. Students were selected for counselling by school staff mainly on the basis of having a close friendship with the deceased. The session focused on students understanding of events leading to the suicide, rumour control and personal reactions. Details of sources of support were provided. School staff were debriefed and they followed up students identified as being at high risk.	Child psychiatrist or trainee psychiatrist with senior school staff
Dyregrov, 1999[84] Survey	Norway	Community	Any person bereaved by suicide (all age groups from 266 communities)	Provides overview of special support programmes offered by Norwegian communities for survivors of suicide. Support varied across the communities. The community doctor and parish priest had active roles in some communities and psychological and psychiatric professionals were more available in southern Norway. Care for children was limited.	Included community physician, parish priest, psychiatrists and psychologists
Renaud, 1995[85] Before and after	Canada	Suicide Prevention Centre	Any person bereaved by suicide	Support Group 10 weekly 2..5 hour group meetings of 8 people and a follow-up meeting 5 weeks later. The main aim was to facilitate a mutual aid system for participants. The four main components were emotional support (e.g. sharing of experiences); cognitive support (e.g. identifying solutions to difficulties); normative support (e.g. mutual aid); adjustment objectives (e.g reducing anxiety and isolation). “Homework” assignments were given at the end of each meeting and each meeting had a specific theme.	Professional group workers
Rogers, 1982[87] Before and after	Canada	Unclear	Adult immediate family members, bereaved less than two years previously	Survivors Support Programme Following an initial meeting with the director, self-referred individuals are matched with a suitable team of 2 volunteers. This is followed by a structured programme of eight sequential 2 hour sessions. The aim is to provide support and assistance in understanding and resolving stresses unique to bereavement by suicide. Participants are then invited to attend 4 biweekly groups which are less structured.	Volunteers (bereaved and not bereaved by suicide) supervised by Professionals
Sandor, 1994[88] Before and after with a non-bereaved comparison group.	USA	Church-related youth group	Peers	Supportive community intervention A meeting was held within days of the suicide. Accurate information was provided on the suicide to prevent rumours. Two hours were spent discussing their feelings in relation to the event. The meeting ended with affirmations about the deceased and recollections about positive times from the past. A second meeting two days later was more structured. Participants were asked to think about depression and express their thoughts about suicide. They were given contact details for support services.	Church youth group leaders

Study reference	Country	Setting	Participants	Intervention	Delivered by
				This was followed by a memorial service. The support group already existed prior to the bereavement though the group was open to non-members following the suicide.	
Watson, 1991[86] Survey	USA	Community	Family	Loving Outreach to Survivors of Suicide (LOSS) Offers three different forms of support individually or in combination - individual counselling - monthly support groups (of 5-30 people) - eight week support groups (of 5-12 people) for newly bereaved	Meetings co-chaired by two facilitators who have been members for at least two years. A professional is always in attendance

(b) Descriptive studies

Study Reference Study design	Country	Setting	Participants	Intervention	Administrator
Al-Mabuk et al., 1996[65] Descriptive	USA	Unclear	Parents	Forgiveness Intervention Model[1] (17 units) Unit 1-2: psychological defences Unit 3-7: expressing emotion toward the event Unit 8-9: commitment to forgive Unit 10-17: active forgiveness but not condolence, resulting in emotional release. The paper also provides a modified Forgiveness Intervention Model.	Psychotherapists
Bernell, 1997[51] Descriptive	USA	Hospital/ mental health centre	Children	Suicide Bereavement Group Phase 1: Orientation Phase Phase 2: Conflict Phase Phase 3: Sharing Work Phase Phase 4: Final Phase – termination of group sessions	Mental health professional
Billow, 1987[68] Descriptive	USA	Unclear	Any person bereaved by suicide	Multiple Family Survivors Group Project Open-ended support group meeting monthly for 2.5 hours. Any bereaved person could attend and multiple family members attended. There seemed to be a separate group for children bereaved by suicide. New participants were encouraged to give a full and explicit account of the death.	Therapists who had been bereaved by suicide
Bouchard, 2004[78, 92] Descriptive	Canada	School	Peers	Programme de postvention en milieu scolaire: strategies d'intervention a la suite d'un suicide. The objectives of the intervention were to prevent further suicides ("contagion"), reduce stress, to focus on vulnerable children and to reduce the impact of the crisis. The interventions included counselling, therapy, debriefing, and meetings.	Unclear
Burgin, 2001[63] Descriptive	Switzerland	Community	Family	Bereaved through suicide support group 'Lichtblick' (ray of hope) (10 sessions) Encourages members to look at their own story in a protected environment, to learn to talk about the suicide in public and to offer help for others bereaved by	Nurse and lay person, both bereaved through suicide

[1] From: Enright, RD., Al-Mabuk, RH., Conroy, P., Eastin, D., Freedman, S., Golden, S., Hebl, J., Oh-Park, Y., Pierce, K & Sarinopoulos, I (199 1). The moral development of forgiveness.

				suicide. Group specific issues are targeted, e.g. 'why' and guilt questions, what helps or did help us, own suicide intentions and depression. For some questions experts are contacted.	
Carter, 1990[52] Descriptive	USA	School	Peers	School-based postvention Developed by Youth Suicide Prevention Service (YSPS). Advises schools on most appropriate procedure, providing 3 levels of crisis intervention. Short-term consultative: emergency evaluation and support Intermediate convergent: crisis resolution Long-term intensive: Insight, adaptation, primary change	School counselling staff
Catone et al. 1991[53] Descriptive	USA	School	Peers	Crisis centre (5 stages) Establish natural groups that provide a safe atmosphere to express feelings and accomplish developmental tasks. First stage: autonomy within the groups Second stage: power and control Third stage: intimacy stage Fourth stage: differentiation, individual needs identified Fifth stage: separation and termination from the group	Therapist
Clark, 1990[72] Clark, 1992[90] Clark, 1993[91] Descriptive	Australia	Community	Any person bereaved by suicide	Bereaved Through Suicide Support Group (BTSSG) Supportive group encouraging sharing of experiences. Uses the Suicide Grief Map. Strategies for self/mutual support encouraged, with focus on self-esteem, coping abilities and personal growth. Emphasis of socialisation within the group. BTSSG: Services include: regular support meetings, 24 hour telephone support, individual support, education in grief management, life style and health care programs.	Trained support workers, counsellors, Professional Advisory Counsel
Danto, [81] Descriptive	USA	Community	Any person bereaved by suicide	Project SOS (Survivors of Suicide) Group meetings, with 8 participants or less usually every 2 weeks. Members work through feelings of bereavement by group discussions. Survivors assigned to one of five groups on the basis of geographical location after contacting the Suicide Prevention and Drug Information Center in Detroit by phone.	2-3 trained volunteers with at least 2 years experience of answering the phones at the centre who received further training
Dunne, 1992[54] Descriptive	USA	Unclear	Family	Psychoeducational approach (1 or 2 sessions) Dysfunction as a result of experience rather than underlying morbid psychological process. Therapist presents the survivor experience, encouraging contribution. Work on the resolution of grief, identification of suicidal ideation and nature of social network.	Therapist
Freeman, 1991[55] Descriptive	USA	Unclear	Any bereaved person by suicide	Group counselling (8 sessions) Sessions include: expression of grief, presentation of Parkes' (1970) stages of grief, and Worden's (1982) tasks of grief resolution, sharing experiences, recounting experience, development of socialising techniques, emotional withdrawal from the deceased, evaluation of therapy.	Counsellor
Goldstein, 1994[74] Descriptive	USA	Baton Rouge Crisis Intervention Center	Children	Group therapy 9-12 week bereavement programme aiming to provide a supportive and nurturing group atmosphere to encourage open, healthy bereavement. Parents attend their own group. The children's sessions involve: Session 1: Establishing rapport and trust through for example, discussion of favourite things and name games. Sessions 2-3: Structured to help children identify and share feelings, for example	Unclear

				through use of "feeling faces". Session 4: Children are asked to bring in photo of deceased and share positive and negative memories. Session 5: The grief process, how feelings change over time and different types of losses are discussed. Session 6: Arts and crafts activities are used to facilitate expression of feelings and recounting memories. Sessions 7-8: Children are encouraged to express their most worrying concerns. At the final session parents and children come together and each child is given an opportunity to share their feelings. There are also individual family meetings after the final session, with further referrals if required.	
Grossman, 1995[67] Descriptive	USA	School	Peers/siblings	Crisis Consultation provided by Community Action for Youth Survival (CAYS) CAYS provide the following forms of consultation depending on the schools need: brief phone consultation, extended phone consultation, community consultation/response, brief on-site consultation, extended on-site consultation.	CAYS staff
Hatton, 1981[56] Descriptive	USA	Unclear	Parents	Group Therapy 8 weekly group sessions of 1.5 hours followed by two concluding biweekly sessions. Group membership was closed after the first meeting. There were three phases: Phase 1 (3 sessions): sharing and ventilation of feelings and placing these feelings in perspective; Phase 2 (5 sessions): Major part of the "grief work" covered. Exploration of adaptive and maladaptive ways of coping, impact on the family, anger and social stigma. Phase 3 (2 sessions): Future orientation and termination of group	Nurse therapists
Hopmeyer, 1993[69] Descriptive	Canada	University	Family	Family Survivors of Suicide Open ended fortnightly meeting involving open discussion of issues.	Facilitated by members with a professional social worker as consultant present; only intervening if a group member is perceived as being at "risk".
Juhnke et al., 1999[57] Descriptive	USA	Unclear	Family	Family Debriefing Model (5 sessions), adapted from the Critical Incident Stress Debriefing (CISD) model. Session 1: Introduction, fact-finding, thoughts and cognitions, reactions to suicide, symptoms, teaching. Session 2-4: Solution focussed techniques, identification of healing behaviours, e.g. positive journal writing. Session 5: Summary of experience	Counsellor
Junge, 1985[58] Descriptive	USA	Unclear	Family	Clinical Art Therapy The art therapist worked with individual family groups of bereaved parents and children. The therapist facilitated the family making a book about the deceased including their good and bad memories, photographs and drawings, events together as a family, their questions about the deaths and their feelings There were approximately 6 weekly sessions though the sessions were not time limited and could extend beyond this.	Art therapist
Katz, 1990[62]	Unclear	Unclear	Any persons	Group therapy	Researcher

Descriptive (abstract)			bereaved by suicide	An 11 week humanistically oriented facilitated therapy group.	
Klingman, 1989 [83] Descriptive	Israel	School	Peers	3-day school based postvention First day: Provision of accurate information about the suicide. Encouraged and supported ventilation of feelings Second day: Counselling of 'acute' reactions, including organised review of events, group sharing, free writing, information on stress and grief, reassurance and return to routine Third day: Termination of on-site consultation following scheduled parent's meeting	Consultation with mental health team and school counsellor. Classroom interventions mainly led by teachers with support from the team
Leenaars, 1990 [80] Descriptive	Unclear	School	Peers	6-stage school based postvention model Stage 1: Consultation with school staff, peers and parents to coordinate and plan every phase of the postvention. Stage 2: Education and information about suicide provided through discussion, seminars and small assemblies (35-50 people) at school and within the community. Stage 3: Crisis intervention utilising basic problem-solving strategies is provided. Stage 4: Community linkage to provide survivors with the most appropriate support is established. Stage 5: Assessment and counselling as needed or when requested by the school principal. Stage 6: Follow-up undertaken periodically and a formal final consultation is performed several months after the suicide to provide closure.	Coordinator of the suicide postvention program
Loing-Hatton, 1981 [82] Descriptive	Unclear	Unclear	Parents	Group Therapy 1.5 hour sessions once a week for 8 weeks, with 2 bi-weekly follow-up sessions. The themes of the meetings were categorised in three phases: Phase 1: Share, express and recount feelings with one another (first 3 meetings) Phase 2: Consideration of coping strategies, gain a perspective of the loss, discuss the effect of the suicide on other children and acknowledge the anger in the child's act of suicide (5 meetings) Phase 3: Termination of group: reminisce about happy family times and plan for the future (2 follow-up meetings)	Therapists
Loo, 2001[49] Descriptive	Canada	Police Departments	Police	Critical Incident Stress Debriefing (CISD) model[2] (1 session) Involves group sessions to share common grief experiences in a supportive environment. Encouraged to express feelings, advice on management of distress and grieving, techniques to improve communication about suicide.	Health services professional trained in CISD
Meade, 2000 [76] Descriptive (abstract)	USA	Web-based	Mental Health professionals	American Association of Suicidology Clinician Survivor Task Force The Task Force was set up to provide consultation, support and education. A website has been established which contains information on a bibliography of pertinent literature, personal accounts, a resource list of other clinicians who have lost a client to suicide and are willing to talk about their experiences. (http://www.iusb.edu/~jmcintos/therapists_mainpg.htm) A study examining the phenomenon of therapists who survive client suicide is	Website

				also being conducted by the Task Force.	
Mitchell, 2003[59] Descriptive	USA	Unclear	Any adults bereaved by suicide	Psychoeducational Support Groups 8 weekly sessions of 2 hours with groups of 10-20 participants. The group leaders take a directive role. The programme has 5 parts: Part 1: introductory session Part 2: Discussion of loss of their loved one for a duration of 2 to 4 weeks Part 3: Interactive presentations about suicidology including updates about research in the field. Part 4: Adaptive coping skills and strategies Part 5: Termination of the group in week 8 and discussion of resources for ongoing support.	Advanced practice mental health nurse and social worker
O'Connor, 1992[70] Descriptive	Ireland	Unclear	Adults	Support Group A closed group of 10 weekly sessions of 2.5 hours. Parents who had lost children through suicide were not mixed with other categories of relatives bereaved by suicide. It used Yalom's(1985) model of group psychotherapy. The main aims for the group were: 1. to discuss the circumstances and effects of the suicide 2. to form a more personally congruent understanding of the death 3. to reality-test guilt 4. to acknowledge the shame and pain of rejection 5. to deal with practical problems such as how to talk to children about the death	Two professionals with personal experience of suicide on a voluntary basis
Paul, 1995[50] Descriptive	Canada	Community and schools	Community and school pupils	Fort McMurray Postvention Protocol A community-based model co-ordinated by a Suicide Response Committee that draws a general critical incident stress intervention protocol. Following debriefing training individuals including school counsellors and teachers were selected for debriefing teams. The protocol covers youth, adult, death of a helping-service professional and multiple completed suicide interventions.	Mental health experts (team leaders) and peer counsellors
Pastras, 1996[73] Descriptive	USA	Community and schools	School pupils	Crisis Response Network Provides crisis intervention and debriefing in schools following suicide, death or other catastrophic death. The service can be accessed through a crisis intervention hospital service via a crisis hotline 24 hours a day, 7 days a week or through three community mental health agencies. The response within schools includes: 1. Writing a statement to be read to pupils. 2. Homeroom teachers allow time for question and discussion and acknowledgement of loss. Counselling is made available, for example through crisis stations around the school. 3. Identification of those most affected. 4. Co-ordination of access to community resources 5. Decision-making about memorials and rituals. 6. Allowing time for students and staff to attend the funeral but not changing school schedule 7. Follow-up with the school for the following few months	Masters-level crisis intervention specialists
Petretic-Jackson, 1996 [79] Descriptive	USA	Univeristy (athletic departments)	Peers	Seven-stage crisis intervention model This intervention is primarily delivered in a group setting Stage 1: Pre-programme including organising the programme in consultation with the athletic department Stage 2: Establish trust, rapport and a working relationship with the mental health	Mental health professionals (at request of athletic directors or coaches)

				professionals Stage 3: Provision of information to students and staff Stage 4: Address and deal with feelings Stage 5: Assessment of the distress and lethality of significantly affected individuals Stage 6: Development an action plan for the bereaved in the following days Stage 7: Ongoing consultation and follow-up	
Resnik, 1969[60] Descriptive	Unclear	Unclear	Family	Psychological Re-synthesis (3 phases) -Psychological Resuscitation: A supportive visit to establish a helping relationship. -Psychological Rehabilitation: Teach new coping skills. Focus upon integrity and the psychopathology of the family equilibrium. -Psychological Renewal: Ending grief, with partial substitution for new object and establishing new contacts.	Mental health professional
Seguin, 1990 [66] Descriptive	Canada	Community	Any persons bereaved by suicide	Group therapy Intervention programme for survivors of suicide which focuses on the development of new coping techniques. 8 meetings, once every 2 weeks, with 2 follow-up meetings 4 and 8 months after. The group aims to offer a place for the bereaved to express their pain and learn new coping strategies. (French) Related to Seguin[39]	Health professionals
Silver, 1992[75] Descriptive	USA	School and community	Communities and pupils in schools affected by suicide or other crises	Lake County Community Crisis Intervention Team (CCIT) The aim is to identify, assess and dissipate emotional trauma associated with community crisis. The crisis may involve suicide, accidents or disaster relief. An on-call team is used. CCIT is activated through a telephone crisis hotline. A description of the team's response in a school to a student suicide is provided.	11 professionals from 5 different agencies
Underwood, 2000 [77] Descriptive	USA	School and community	Communities and pupils in schools affected by suicide or other traumatic deaths.	The New Jersey postvention model. The aim is to minimise contagion and to facilitate the grief process. The interventions and issues raised include: a faculty meeting, student support, media interaction, funeral planning, community meeting and any additional meetings. Special consideration is given to contagion concerns and guidelines for memorials are presented.	School and community "crisis teams".
Wenckstern , 1993[64] Descriptive	Canada	School	Peers	Postvention program following traumatic event Program includes: Consultation, crisis intervention, community linkage, assessment and counselling, education, liaison with the media, follow-up.	Traumatic Events Response Team (TERT) consisting of identified school personnel and mental health professionals.
Winter, 2005 [71] Descriptive	Germany	Community (sponsored by private and health insurance companies)	Any persons bereaved by suicide	'Angehorige um Suizid e.V. (AGUS) Self-help organisation: helps with finding local self-help groups and other assistance, makes contact between bereaved persons, week-end seminars differentiated for relationship to lost person lead by bereaved person, newsletter, literature recommendations, annual conferences, training for group leaders, presentations for schools etc, contribution to the national German suicide prevention programme, public relations supported by a travelling exhibition. The local groups have rarely specified themes but are led by the individual needs of the members, professionals are rarely involved in the meetings.	Lay persons bereaved by suicide