

What are the most effective interventions to support children and young people bereaved by suicide in the family: a rapid review

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Abstract:

Bereavement by suicide is different from other forms of bereavement and needs specialised support. Children and young people who lost loved ones to suicide are more likely to suffer a complicated bereavement process and have poorer mental health.

This review aims to assess the evidence for the effectiveness of interventions to support children and young people (up to the age of 24 years) bereaved by suicide. The review included evidence available up until 29 March 2023. Three studies were identified and all reported on group therapy interventions lasting between 10 and 14 weeks.

Key findings and certainty of the evidence: Reductions in anxiety and depressive symptoms were found in children who received the group interventions. However, due to the types of study designs used and limitations of the included studies, it is unclear if this is attributable to the interventions, so caution should be applied when generalising the results.

The strongest evidence came from a non-randomised controlled study, in which children in the intervention group had significantly greater reduction of anxiety and depressive symptoms compared with children in the control group. However, this study was limited due to numbers of participants lost to follow-up.

Research Implications and Evidence Gaps: Further research is needed to develop interventions to support children and young people bereaved through death by suicide of a family member. Additional research is needed to evaluate the effectiveness and cost-effectiveness of planned interventions.

Policy and Practice Implications: It is difficult to draw firm conclusions due to the limited evidence and low quality of included studies. However, there are indications that group interventions may help to reduce anxiety and depressive symptoms in children bereaved by suicide. It will be important to develop guidance and standards of practice for these services based on best available evidence. All such services must use validated outcome measures as part of an integral evaluation process set up from service initiation.

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NOTE: This preprint reports new research that has not been certified by peer review and should not be used to guide clinical practice.



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Interventions to support children and young people bereaved by suicide in the family

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What are the most effective interventions to support children and young people bereaved by suicide in the family?

Report number – RR0007 (September 2023)

EXECUTIVE SUMMARY

What is a Rapid Review?

Our rapid reviews (RR) use a variation of the systematic review approach, abbreviating or omitting some components to generate the evidence to inform stakeholders promptly whilst maintaining attention to bias.

Who is this summary for?

The review was requested to inform one of the Welsh Government's suicide prevention strategy objectives: "to provide information and support to those bereaved or affected by suicide and self-harm", and to build on the recent consultation on "postvention" (suicide bereavement) support with a view to developing guidance on responding to young people affected by suicide.

Background / Aim of Rapid Review

Bereavement by suicide is different from other forms of bereavement and needs specialised support. Children and young people who lost loved ones to suicide are more likely to suffer a complicated bereavement process and have poorer mental health. This review aims to assess the evidence for the **effectiveness of interventions to support children and young people** bereaved by suicide. The findings will guide Welsh Government's strategy and work with agencies and charities that support children and young people following the suicide of a close family member.

Results

Recency of the evidence base

The review included evidence available up until 29 March 2023.

Extent of the evidence base

- Three studies were identified: 2 uncontrolled pre-post studies and 1 non-randomised controlled study.
- All three studies reported on **group therapy interventions** lasting between 10 and 14 weeks.
- Sample sizes ranged between 5 and 75 (41 after dropout) children.
- All three studies measured changes in mental health outcomes and at least one social or behavioural outcome.
- Studies were conducted in Canada, the United States of America and Ireland.
- **Generalisability of the results is limited** due to the small sample sizes and study designs.

Key findings and certainty of the evidence

- **Reductions in anxiety and depressive** symptoms were found in children who received the group interventions. However, due to the types of study designs used and limitations of the included studies, it is **unclear if this is attributable to the interventions**, so caution should be applied when generalising the results.
- The strongest evidence came from a non-randomised controlled study, in which children in the intervention group had significantly greater reduction of anxiety and depressive

symptoms compared with children in the control group. However, this study was limited due to numbers of participants lost to follow-up.

- Some behavioural and social outcomes, such as anger and disruptive behaviour, were also measured, but the results are more inconclusive due to the small sample sizes and lack of a control group in those studies.

Research Implications and Evidence Gaps

Further research is needed to develop interventions to support children and young people bereaved through death by suicide of a family member. **Additional research is needed to evaluate the effectiveness and cost-effectiveness** of planned interventions.

Policy and Practice Implications

It is difficult to draw firm conclusions due to the limited evidence and low quality of included studies. However, there are **indications that group interventions may help to reduce anxiety and depressive symptoms** in children bereaved by suicide. It will be important to **develop guidance and standards of practice** for these services based on best available evidence. All such services must use validated outcome measures as part of an integral evaluation process set up from service initiation.

Economic Considerations (to be reviewed)

- An estimated 300-350 people die by suicide in Wales each year, costing the Welsh economy between £760million and £880million per annum.
- Suicide risks increase during periods of economic recession. Economic downturns categorised by rising unemployment further exacerbate this risk.
- Early parental death (before the age of 21) was found to be consistently associated with higher risk of hospitalisation and higher medication use for mental health disorders as well as increased work absenteeism due to illness in adulthood. Higher healthcare resource use and increased absenteeism both contribute to greater incurred costs to society.
- There is potential for interventions to support children and young people bereaved by suicide to be highly cost-effective, but this remains currently unproven.

DETAILED REPORT

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Abbreviations:

Acronym	Full Description
CI	Confidence Interval
EI	Emotional intelligence
p	Probability
M	Mean/Average
NR	Not reported
RCT	Randomised Controlled Trial
RR	Relative Risk
SD	Standard deviation
T1/T2	Time interval (pre-intervention (T1) / (post-intervention (T2)
USA	United States of America

1. BACKGROUND

1.1 Who is this review for?

This Rapid Review was conducted as part of the Health and Care Research Wales Evidence Centre Work Programme. The question for this review was suggested by the Suicide and Self-Harm Prevention team in the NHS Wales Executive to support the Welsh Government's suicide prevention strategy objectives to provide information and support to those bereaved or affected by suicide and self-harm; to build on the recent consultation on draft guidance on how we respond to people affected or bereaved by suicide; and to inform the development of the new Suicide and Self-harm Prevention Strategy. The findings will guide the Government's work with agencies and charities that support children and young people following the suicide of a close family member.

1.2 Background and purpose of this review

In 2021, there were 5,583 suicide deaths in England and Wales (Office for National Statistics, 2022). Many of these deaths would have been parents or siblings, leaving behind bereaved children and young people.

Bereavement by suicide is different from other forms of bereavement, and the need for specialised support is indicated (Braiden et al, 2009; Pfeffer et al, 2002). Children who lost loved ones to suicide are more likely to experience a complicated or complex bereavement process and have poorer mental health outcomes (Andriessen et al, 2016; Braiden et al, 2009; Pitman et al, 2014). Compared to others, children and young people bereaved by family suicide are at higher risk of dying by suicide (Calderaro et al, 2021; Del Carpio et al, 2021; Hua et al. 2019) and experiencing a range of other negative outcomes, such as attempting suicide (Calderaro et al, 2021; Del Carpio et al, 2021) and self-harm (Del Carpio et al, 2021).

Prior to this review, an initial search for secondary evidence (systematic reviews, rapid reviews and scoping reviews) revealed a number of relevant reviews (Andriessen et al, 2019; Bergman et al, 2017; Chen and Panebianco, 2018; Hua et al, 2020; Journot-Reverbel et al; 2017, Kaspersen et al, 2022; Ridley and Frache, 2020). However, only one review (Journot-Reverbel et al. 2017) was specific to the inclusion criteria. The other reviews included adults as well as children and adolescents, or children and adolescents bereaved by causes other than suicide. The primary studies reported in the Journot-Reverbel et al. (2017) review (Daigle and Labelle, 2012; Pfeffer et al, 2002) were included in this work, as well as an additional study. The search conducted for this review also covered a more recent period up to March 2023.

2. RESULTS

2.1 Included studies

A search for primary studies identified 348 records, of which 3 studies met the inclusion criteria (Section 5.1) and were included in this review. Those were two studies with a pre-post design and one non-randomised controlled study. See Section 6.2 for a detailed summary of the included studies.

2.1.1. Study description

The non-randomised controlled trial (Pfeffer et al, 2002) was based in the USA. This study reported on an intervention that included 10 weekly 1.5-hour group sessions which involved psychoeducational and supportive components. The aim of the intervention was to promote children’s healthy adjustment after family suicide and to reduce morbid outcomes. Semi-structured interviews were conducted pre- and post-intervention to measure psychosocial variables with time between interviews being between 2.5-4.5 months. The study included 75 children initially (39 children in the intervention group and 36 children in the control group), but saw a high drop-out rate, with 32 children retained in the intervention group and 9 children in the control group. The children were aged between 6 and 15 years old and split into three age groups for the intervention.

One uncontrolled pre-post study (Daigle and Labelle, 2012) reported a pilot evaluation of the Group Therapy Program for Children Bereaved by Suicide based in Canada. This intervention includes 12 two-hour group therapy sessions over 14 weeks which aim to help children and their surviving parents cope with the difficulties of the grieving process. This was evaluated using observation checklists during the programme as well as psychological and social assessments two to three weeks before and one to two weeks after. The study included 8 children aged 6 to 12 years old.

The other uncontrolled pre-post study (Veale et al, 2014) was based in Ireland. This was a group intervention comprising of therapeutic groupwork of 1.5 hours per week over 12 weeks including art, physical, reflective and mindfulness activities. This intervention aimed to progressively explore the bereavement experience, moving to memories of the loved ones and finally a focus on the future. Behavioural, psychological and social outcomes were assessed pre-intervention, post-intervention, and then during six-month and four-year follow-ups.

The studies are summarised in Table 1.

Table 1. Summary of interventions

Study (Country)	Study design	Type of intervention	Aim of intervention	Sample size and age	Length of intervention and follow-up
Daigle, 2012 (Canada)	Pre-post	Group therapy	To help children and their surviving parents cope with the complex grieving process	8 children aged 6-12	12 two-hour sessions over 14 weeks. Measures taken 2-3 weeks before and 1-2 weeks after the programme
Pfeffer, 2002 (USA)	Non-randomised controlled	Group therapy	To help children cope during bereavement after parental or sibling suicide and to reduce morbid outcomes	75 children initially, 41 retained (32 intervention, 9 control), aged 6-15	10 weekly 1.5-hour sessions. 2.5-4.5 months from initial to outcome assessments
Veale, 2014 (Ireland)	Pre-post	Group therapy	To progressively explore the bereavement experience	5 children aged 8-12 at pre-post and 6-month follow-up, 3 retained at 4-year follow-up	12 weekly 1.5-hour sessions. Measures taken post-intervention and at 6-month and 4-year follow-ups

2.1.2. Outcomes measured

These studies covered a variety of mental health, social and behavioural outcomes. The number of studies that measured each outcome is summarised in Table 2.

Table 2. Summary of outcomes reported in included studies

Category	Outcome	No of studies
Mental Health outcomes	Anxiety	2 ^{1,2}
	Depression	2 ^{1,2}
	Internalising	1 ³
	General mood	1 ¹
	Intrapersonal EI	1 ¹
	Posttraumatic stress	1 ²
	Grief	1 ¹
Social and behavioural outcomes	Anger	1 ¹
	Disruptive behaviour	1 ¹
	Externalising	1 ³
	Stress management	1 ¹
	Adaptability	1 ¹
	Competence (activities, school, social)	1 ³
	Task difficulty	1 ³
	Hope	1 ¹
	Self-esteem	1 ¹
	Social adjustment	1 ²
	Relationships with parents	1 ³
	Interpersonal EI	1 ¹

EI = Emotional intelligence. ¹Daigle (2012), ²Pfeffer (2002), ³Veale (2014).

2.2 Effectiveness of group interventions for mental health outcomes

All three studies included in this review measured children's mental health outcomes, although specific outcomes varied by study. Anxiety and depression were measured in two studies (Daigle and Labelle, 2012; Pfeffer et al, 2002). Other mental health outcomes, such as internalising symptoms, general mood, posttraumatic stress, and grief, were each measured in one study.

2.2.1. Anxiety, depression and general mood

Both studies that examined changes in anxiety (Daigle and Labelle, 2012; Pfeffer et al, 2002) observed improvements in participating children's outcomes. There was a greater reduction ($p \leq .004$) and rate of reduction ($p \leq .01$) in the intervention group than in the control group in a controlled study of children aged 6–15 (Pfeffer *et al*, 2002). Significant reduction in anxiety was noted in the intervention group between the assessments before (T1) and after (T2) the intervention ($F_{1,25} = 4.6$, $p \leq .04$). A pre-post study of children aged 6-12 also saw a 13.65% reduction in anxiety, but no statistical tests were conducted due to the small sample size (Daigle and Labelle, 2012).

Two studies measured depression scores pre- and post-intervention (Daigle and Labelle, 2012; Pfeffer et al, 2002). Both reduction of depression ($p \leq .0003$) and the reduction rate ($p \leq .0006$) were greater in the intervention group than in the control group and there was a significant decrease in depression from T1 to T2 ($F_{1,26} = 10.6$, $p \leq .003$) in the intervention group in the controlled study (Pfeffer et al, 2002). Daigle and Labelle (2012) also noted a 11.99% reduction in depressive symptoms, but the small sample size precluded testing whether the difference was statistically significant.

In addition, the pre-post study conducted by Veale (2014) reported internalising scores in children aged 8–12. Out of the five children that participated, pre-intervention, four scored within the clinical range for internalising and one had a borderline score. Post-intervention, one child was in the clinical range and two had borderline scores, which remained the case at 6 months after the intervention. At the 4-year follow-up, in which three out of the five children took part, all three scored within the normal range.

Children's general mood pre- and post-intervention was measured in one study, which saw a 3.08% improvement in their scores (Daigle and Labelle, 2012). At the same time, children's intrapersonal emotional intelligence, i.e., their ability to understand their emotions, increased by 6.34%. No statistical tests were conducted.

2.2.2. Posttraumatic stress and grief

Changes in posttraumatic stress were measured in one study, which observed no significant change within the intervention group and no significant differences in outcome scores or rates of change between the intervention and the control groups (Pfeffer et al, 2002). However, children's grief symptoms were reduced by 29.52% for children taking part in another group intervention (Daigle and Labelle, 2012).

2.2.3. Bottom line results for mental health outcomes

Overall, the three studies included in this review reported improvements in mental health outcomes, however, the methodological limitations of these studies, such as small sample sizes and the lack of a control group in the pre-post studies (Daigle and Labelle, 2012; Veale, 2014) as well as the lack of randomisation, the high drop-out rate, and the differences between the intervention and control groups in the controlled study (Pfeffer et al, 2002) limit the generalisability of the findings.

2.3

2.4 Effectiveness of group interventions for social and behavioural outcomes

All three studies examined at least one social or behavioural outcome of participating children, such as anger, disruptive behaviour, stress management, adaptability. Each of the outcomes reported below was only reported in one study.

2.3.1. Anger and disruptive behaviour

One study examined changes in children's anger and disruptive behaviour (Daigle and Labelle, 2012). They observed a 10.42% reduction in disruptive behaviour, but a 7.91% increase in anger scores. However, another study, also using a pre-post design, saw a general decrease in externalising symptoms, with two of the five participating children in the clinical range post-intervention and three children having borderline scores at 6 months, compared to three children in the clinical range before the intervention (Veale, 2014). At the 4-year follow-up, all three children who took part scored in the normal range.

2.3.2. Stress management and adaptability

Stress management and adaptability were examined in one pre-post study (Daigle and Labelle, 2012). Improvements were observed in both outcomes (+4.24% and +4.45% respectively). However, no statistical tests were conducted due to sample size limitations.

2.3.3. Competence and self-esteem

A pre-post study of five children measured their competence in performing activities, school tasks, and social functions (Veale, 2014). Only one of the five children scored in the clinical range pre-intervention and all five children had scores in the normal range post-intervention and at the 6-month follow-up. Three children participated in the 4-year follow-up and had scores in the normal range.

Children also received a functional assessment within the same intervention which measured their perceived levels of difficulty completing various tasks. Three out of the five children said that most or all tasks were easier six months post-intervention, but there was no clear pattern to these changes pre-intervention to immediately after the intervention, to six months later.

Children's hope about achieving their goals was examined in one study (Daigle and Labelle, 2012). The questions related to their goal-directed determination and planning of ways to meet their goals. There was an improvement of 11.57% and 18.58% on these dimensions respectively, as well as an overall improvement of 14.85%. In addition, there was a 12.44% improvement in children's self-esteem pre- and post-intervention.

2.3.4. Social relationships

There were no differences in social adjustment before and after the intervention, or between the intervention and control groups at T2, for children participating in a controlled study of a group intervention (Pfeffer et al, 2002). However, in the other studies, improvements in relationships and interpersonal emotional intelligence were observed. In a pre-post study, four out of five participating children described their relationships with their parent(s) as good post-intervention and at the 6-month follow-up, compared to three children pre-intervention (Veale, 2014). Children's interpersonal emotional intelligence saw a 9.71% increase in the other pre-post study (Daigle and Labelle, 2012).

2.3.5. Bottom line results for social and behavioural outcomes

All outcomes reported in this section apart from social adjustment were examined in pre-post studies (Daigle and Labelle, 2012; Veale, 2014), so no control group was present. In addition, the sample sizes in these studies were severely limited, precluding the possibility of conducting statistical tests. This limits the generalisability of the findings.

3. DISCUSSION

3.1 Summary of the findings

Limited evidence is available on support interventions for children and young people bereaved by suicide. Only three comparative studies examining such interventions were located. Overall, the interventions reviewed in this report showed promising results, but the methodological limitations preclude any definitive conclusions. No evidence was found on support interventions for very young children below the age of 6 or young people older than 15, but below 24.

All three included studies (Daigle and Labelle, 2012; Pfeffer et al, 2002; Veale, 2014) reported on group interventions. The most common outcomes examined by the studies included in this review were related to the symptoms of anxiety and depression, with two studies (Daigle and Labelle, 2012; Pfeffer et al, 2002) examining changes specifically in anxiety and depression, and one more study (Veale, 2014) reporting on internalising symptoms. All three studies observed improvements, however, the absence of a control group in the pre-post studies makes it impossible to determine that the changes were attributable to the interventions. Other types of outcomes (such as anger and disruptive behaviour, self-esteem, social adjustment) were only examined in one study each.

Though the non-randomised controlled study (Pfeffer et al, 2002) provided stronger evidence for the efficacy of a group intervention for reducing anxiety and depressive symptoms, several methodological problems were identified, including alternating (rather than random) assignment, differences between groups, and major dropout among non-intervention families (75% vs 18% among families who received the intervention). The two pre-post studies (Daigle and Labelle, 2012; Veale, 2014) observed positive changes in the participating children in terms of change percentage and the number of children in the clinical range for various outcomes, however, the lack of statistical analysis due to the small sample size and the lack of a control group were key limitations.

While this review captured only those studies where the outcomes of interventions for bereaved children were measured quantitatively, it is helpful to turn to studies employing qualitative design to understand why such interventions may be effective. In addition to the content of the intervention, the context in which it takes place is important. For example, bereaved children who participated in group interventions stated that such programmes helped them to feel less alone as they had the opportunity to meet others who shared the same experience and could therefore understand what they were going through (Braiden et al, 2009; Hagstrom, 2021; McClatchey and Wimmer, 2012). Being able to meet others who had been bereaved by suicide and openly talk about a loved one's death helped some participants destigmatise their understanding of suicide (Hagstrom, 2021). They were also able to see how other children and young people were dealing with the suicide (McClatchey and Wimmer, 2012). This suggests that the group aspect is an important part of the intervention. Even though these qualitative studies do not fit the eligibility criteria for this review, the summary of their results is provided in Appendix 3.

3.2 Strengths and limitations of the available evidence

The evidence presented in this review has a number of limitations. Two of the three included studies (Daigle and Labelle, 2012; Veale, 2014) used a pre-post design with no control group and had small sample sizes (8 and 5 children respectively), meaning that their findings may not be generalisable to other contexts. Only one controlled study of an intervention for suicide-bereaved children was found (Pfeffer et al, 2002), however, the children were not randomly assigned to the intervention and control groups and the study saw a large dropout rate, particularly in the control group. While all three studies observed improvements in children's outcomes, their findings should be treated with caution due to the methodological limitations of these studies.

3.3 Strengths and limitations of this Rapid Review

Although this review was conducted rapidly to inform policy and decision makers, comprehensive search strategies were designed to identify relevant evidence in the bibliographic databases. Database searches were supplemented by searching a range of websites known to review team and the stakeholders as being potentially relevant.

In conducting this rapid review, two reviewers independently carried out study selection. However, quality appraisal and data extraction were carried out by single reviewers and independently checked for accuracy. Any disagreements were resolved through discussion. The review consists of 3 primary studies conducted in Ireland, Canada and the USA. All included studies had significant limitations. The primary weakness is the sample size and lack of a control group. Due to the paucity of evidence, we were unable to undertake any assessment of the outcomes using GRADE.

This review highlights that there is a lack of research in this area and the need for further research into the development and evaluation of interventions.

3.4 Implications for policy and practice

Given the limited evidence available on support interventions for children and young people bereaved by suicide, it will be important to develop guidance and standards of practice for these services based on best available evidence. All services developed will need to have measurable validated outcomes as part of an integral evaluation process set up from service initiation.

These findings will be presented and discussed at the National Advisory Group to Welsh Government for Suicide and Self-Harm Prevention and will inform the development of guidance setting out a systems response to children and young people affected or bereaved by suicide.

3.5 Implications for future research

There is a need for high quality primary studies examining the effectiveness of bereavement support interventions for children and young people bereaved through the suicide of a family member. These studies should aim for rapid translation of evidence into practice to ensure service improvement and involvement of children and young people, highlighting important aspects of an intervention as well as its delivery.

3.6 Economic considerations*

- An estimated 300-350 people die by suicide in Wales each year (Samaritans 2017). Inflated to July 2023 prices, these suicides cost the Welsh economy between £760million and £880million per annum. Approximately 70% of these costs are attributed to emotional impacts on family and on society (Public Health England, 2020; Bank of England 2023).
- Suicide risks increase during period of economic recession. Economic downturns categorised by rising unemployment further exacerbate this risk. The lag in macroeconomic conditions improving after recession can lead to these suicide risks persisting for several years, especially if personal circumstances have not improved (Samaritans, 2017).
- The attempted suicide or loss of a parent to suicide are categorised as Adverse Childhood Experiences (ACEs). An evidence base exists around economic impacts of ACEs more generally (Hughes et al., 2021).
- Early parental death (before the age of 21) was found to be consistently associated with higher risk of hospitalisation and higher medication use for mental health disorders as well as increased work absenteeism due to illness in adulthood (Böckerman, Haapanen and Jepsen, 2023). These risk factors in turn can incur additional costs to society through additional resource use cost and productivity losses. Early parental death was also linked to a significant reduction in years of school attendance, employment and earnings in adulthood. Although the detrimental impacts were observed for both males and females, the negative consequences for parental death were greater for males (Böckerman et al., 2023).

**This section has been completed by the Centre for Health Economics & Medicines Evaluation (CHEME), Bangor University*

4. REFERENCES

- Andriessen, K., Draper, B., Dudley, M. and Mitchell, P. B. (2016). "Pre- and postloss features of adolescent suicide bereavement: A systematic review", *Death Studies*, 40(4), 229-246, doi:10.1080/07481187.2015.1128497
- Andriessen, K. *et al.* (2019) "Effectiveness of interventions for people bereaved through suicide: A systematic review of controlled studies of grief, psychosocial and suicide-related outcomes", *BMC Psychiatry*, 19(1). doi:10.1186/s12888-019-2020-z.
- Bank of England; Inflation Calculator, 2023. URL: <https://www.bankofengland.co.uk/monetary-policy/inflation/inflation-calculator>
Accessed 24/08/2023.
- Bergman, A.-S., Axberg, U. and Hanson, E. (2017) "When a parent dies – a systematic review of the effects of support programs for parentally bereaved children and their caregivers", *BMC Palliative Care*, 16(1). doi:10.1186/s12904-017-0223-y.
- Böckerman, P., Haapanen, M., & Jepsen, C. (2023). Early parental death and its association with children's mental and economic well-being in adulthood: a nationwide population-based register study. *Journal of epidemiology and community health*, 77(10), 625–631. <https://doi.org/10.1136/jech-2023-220692>
- Braiden, H. J., McCann, M., Barry, H., et al. (2009) "Piloting a Therapeutic Residential for Children, Young People and Families Bereaved through Suicide in Northern Ireland", *Child Care in Practice*. 15:2, 81–93. doi:10.1080/13575270802685344
- Calderaro, M., Baethge, C., Bempohl, F., Gutwinski, S., Schouler-Ocak, M. and Henssler, J. (2022) "Offspring's risk for suicidal behaviour in relation to parental death by suicide: systematic review and meta-analysis and a model for familial transmission of suicide," *The British Journal of Psychiatry*. Cambridge University Press, 220(3), pp. 121–129. doi:10.1192/bjp.2021.158.
- Chen, C.Y.-C. and Panebianco, A. (2017) "Interventions for young bereaved children: A systematic review and implications for School Mental Health Providers", *Child and Youth Care Forum*, 47(2), pp. 151–171. doi:10.1007/s10566-017-9426-x.
- Daigle, M. S., and Labelle, R. J. (2012). "Pilot evaluation of a group therapy program for children bereaved by suicide", *Crisis*, 33(6), 350–357. doi: 10.1027/0227-5910/a000147
- Del Carpio, L., Paul, S., Paterson, A. and Rasmussen, S., 2021. "A systematic review of controlled studies of suicidal and self-harming behaviours in adolescents following bereavement by suicide", *PLoS one*, 16(7), p.e0254203.
- Grant MJ, and Booth A, (2009). "A typology of reviews: an analysis of 14 review types and associated methodologies", *Health Information and Libraries Journal* 26, 91–108. doi:10.1111/j.1471-1842.2009.00848.x
- Hagström A. S., (2021) "A Narrative Evaluation of a Grief Support Camp for Families Affected by a Parent's Suicide", *Frontiers in Psychiatry* 12:783066. doi: 10.3389/fpsyt.2021.783066
- Hua, P. *et al.* (2020) "A systematic review on the protective factors that reduce suicidality following childhood exposure to external cause parental death, including suicide", *Journal of Affective Disorders Reports*, 2, p. 100032. doi:10.1016/j.jadr.2020.100032.
- Hua, P., Bugeja, L., and Maple, M. (2019). "A systematic review on the relationship between childhood exposure to external cause parental death, including suicide, on subsequent suicidal behaviour", *Journal of Affective Disorders* 257: 723-734
- Hughes K, Ford K, Bellis MA, Glendinning F, Harrison E, Passmore J. Health and financial costs of adverse childhood experiences in 28 European countries: a systematic review and meta-analysis. *Lancet Public Health*. 2021;6(11):e848-e857. doi:10.1016/S2468-2667(21)00232-2
- Joanna Briggs Institute, 2017. Critical appraisal checklist for quasi-experimental studies (non-randomized experimental studies). Available at <https://jbi.global/critical-appraisal-tools> (Accessed: May 2023)

- Journot-Reverbel, K., Raynaud, J. P., Bui, E., et al. (2017). "Support groups for children and adolescents bereaved by suicide: lots of interventions, little evidence", *Psychiatry research* 250, 253-255.
- Kaspersen, S.L. et al. (2022) "Use of health services and support resources by immediate family members bereaved by suicide: A scoping review", *International Journal of Environmental Research and Public Health*, 19(16), p. 10016. doi:10.3390/ijerph191610016.
- McClatchey, I. S., and Wimmer J. S. (2012) "Healing components of a bereavement camp: children and adolescents give voice to their experiences", *Omega* (Westport). 65(1):11-32. doi: 10.2190/OM.65.1.b.
- National Heart, Lung, and Blood Institute (NHLBI) - Quality Assessment Tool for Before-After (Pre-Post) Studies With No Control Group. Available at: <https://www.nhlbi.nih.gov/health-topics/study-quality-assessment-tools>. (Accessed: May 2023.)
- Office for National Statistics (2022). *Suicide in England and Wales: 2021 registrations*. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2021registrations> (Accessed: 05 May 2023)
- Pfeffer, C. R., Jiang, H., Kakuma, T., et al. (2002). "Group intervention for children bereaved by the suicide of a relative", *Journal of the American Academy of Child and Adolescent Psychiatry*, 41(5), 505–513. doi:10.1097/00004583-200205000-00007
- Pitman, A., Osborn, D., King, M., et al. (2014). "Effects of suicide bereavement on mental health and suicide risk", *The Lancet. Psychiatry* 1(1): 86-94.
- Public Health England, 2020. Local suicide prevention planning: a practice resource. URL: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/939479/PHE_LA_Guidance_25_Nov.pdf Accessed 24/08/2023
- Ridley, A. and Frache, S. (2020) "Bereavement care interventions for children under the age of 18 following the death of a sibling: A systematic review", *Palliative Medicine*, 34(10), pp. 1340–1350. doi:10.1177/0269216320947951.
- Ryan R, Hill S (2016) How to GRADE the quality of the evidence. Cochrane Consumers and Communication Group, available at <http://cccrg.cochrane.org/author-resources>. Version 3.0 December 2016
- Welsh Government (2015) Talk to me 2: Suicide and Self Harm Prevention Strategy for Wales 2015-2020. Welsh Government.
- Samaritans 2017. Socioeconomic disadvantage and suicidal behaviour: finding a way forward for Wales URL: https://media.samaritans.org/documents/Socioeconomic_disadvantage_and_suicidal_behaviour_bilingual.pdf Accessed 24/08/2023.
- Veale, A. (2014). "Longitudinal evaluation of a therapeutic group work intervention with suicide-bereaved children", *The Irish Journal of Psychology*, 35(4), 188-204. doi:10.1080/03033910.2015.1058177

5. RAPID REVIEW METHODS

5.1 Eligibility criteria

Table 3. Inclusion and exclusion criteria.

	Inclusion criteria	Exclusion criteria
Population	Children and young people up to age 24 years who have experienced a bereavement by suicide of a close family member (parent, sibling, grandparent).	Bereavement due to other causes of death. Bereavement from suicide outside the family. Adult samples exclusively 25 years+. Samples where is not possible to extract separate data for ≤ 24 years.
Intervention / exposure	Support programmes targeted at children and young people bereaved by suicide in the family.	Support programmes targeted at adults that include under 25s.
Counter intervention	No intervention / alternative intervention where appropriate.	
Outcome measures	Primary outcomes(s): all mental health outcomes (including, but not exclusively, suicide, suicide attempt, self-harm and suicide ideation). Secondary outcomes(s): n/a	
Study design	Any comparative intervention study, e.g. controlled or pre-post.	
Countries	OECD High-income countries , particularly Europe, Australia, New Zealand and North America.	
Language of publication	English.	
Publication date	2000 onwards.	
Publication type	Primary research – published, preprint and grey literature.	Secondary research, conference abstracts, editorials, commentaries, opinion pieces.
Other factors Any other key points to note	It is key to the review that the interventions are targeted for children and young people, so age of participants will likely refer to both age at bereavement and at time of participation.	

5.2 Literature search

Prior to planning this review, a preliminary review of existing reviews was conducted. The findings were presented to the stakeholders and used to refine the scope of the present rapid review of primary studies, and to inform the methods. For details of all the resources searched, please refer to Appendix 1.

A comprehensive search was designed in Medline (see Appendix 2) to identify relevant primary studies and was then translated to the databases listed in Appendix 1. This used a combination of text words, thesaurus terms and medical subject headings. Known literature included relevant studies extracted from the reviews identified during the preliminary searches for existing reviews, and any reports highlighted by the stakeholders.

The grey literature search consisted of reports identified by the review team or provided by stakeholders. Additionally, a search of grey literature websites was generated in collaboration

with the stakeholders. For searching grey literature resources, a broad search using word variations of the terms: 'suicide', 'bereavement', 'child suicide', 'child bereavement', 'young people suicide', 'young people bereavement', 'taken own life' was conducted.

Searching was completed on the 5th of April 2023. Database searches were imported into EndNote 20 and deduplicated by a single reviewer. Grey literature search results were added to an EndNote library and cross-checked against the database master EndNote library.

5.3 Study selection process

The final deduplicated EndNote library was imported into Rayyan, and screening was conducted by two independent review authors. Eligibility criteria was used to assess the titles and abstracts and then full text of all sources identified by the search. The full-text study selection was conducted independently by two reviewers. Grey literature reports were also assessed for eligibility by an individual reviewer and were checked by a second reviewer. The reference lists of any identified systematic reviews were also scanned for any additional relevant primary research.

5.4 Data extraction

From each study, the following information was extracted: author(s), year, country, study design, study aim, aim of intervention, type of intervention, data collection methods, sample size, participants, inclusion criteria, setting, geographic location, dates of data collection, key findings. One reviewer carried out data extraction and another reviewer checked the accuracy. Please see Section 6.2 for more information.

5.5 Study design classification

This review included all comparative intervention studies located during the systematic search, e.g. controlled or pre-post.

5.6 Quality appraisal

The methodological quality of included studies was assessed for the trustworthiness, relevance and results reported using the following critical appraisal tools:

- JBI Critical Appraisal Checklist for quasi-experimental studies
- NHLBI Quality Assessment Tool for Before-After (Pre-Post) Studies With No Control Group

One reviewer assessed the methodological quality of the included studies and a second reviewer verified the judgement. Any disagreements were resolved through discussion. All quality assessment data are presented in the critical appraisal data tables (Tables 5/6, Section 6.3).

5.7 Synthesis

A narrative approach was used, including tables detailing the extracted data, to provide descriptive summaries of the selected studies to the reader. This type of analysis is recommended for rapid reviews (Grant and Booth 2009).

5.8 Assessment of body of evidence

Due to the paucity of evidence, we were unable to undertake any assessment of the outcomes using GRADE.

6. EVIDENCE

6.1 Search results and study selection

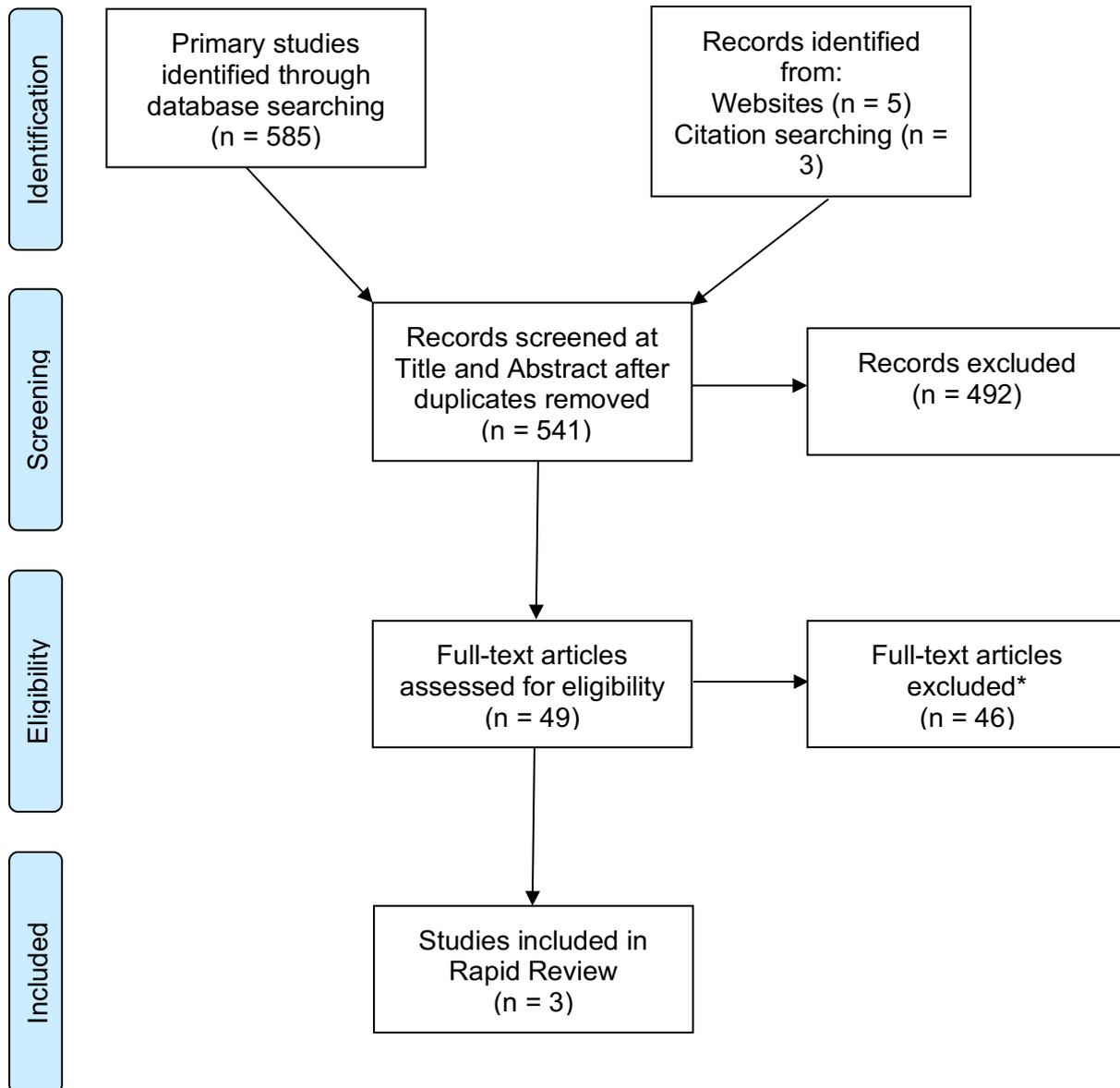


Figure 1. The PRISMA flow diagram.

*See tables of excluded studies in appendix 4

6.2 Data extraction

Table 4. Data extracted from included studies.

Citation (Country)	Study Details	Participants and setting	Key findings	Observations/ notes
Daigle (2011/2012) Canada	<p>Study Design: Pre-post</p> <p>Study Aim: To test the Group Therapy Program for Children Bereaved by Suicide [PCBS] in a preliminary evaluation.</p> <p>Aim of intervention: To help children and their surviving parents cope with this difficult period and complex grieving process. <u>Specifically:</u></p> <ul style="list-style-type: none"> • Provide children with a place to talk about what they are going through, question themselves, express themselves, and be with other children in the same situation. • Help children express emotions and recognize them as normal. • Rule out suicide as a way of solving problems and broaden children's personal resources. • Facilitate communication about the suicide between parents and children. • Help children come to terms with death by explaining its irreversibility, the fact that vital functions cease, and demythifying some of its aspects. <p>Type of intervention: Group therapy. 12 2-h sessions over 14 weeks; parents attend last half hour of each session. The first ten sessions 1 week apart and the last two 2 weeks apart to facilitate separation from the group.</p> <p>Data collection methods: Observation checklists during programme and measures via</p>	<p>Sample size: 8 children</p> <p>Participants: 3 girls and 5 boys, mean age 10.5 years (SD = 1.87; range 6-12). 6 lost father, 2 lost mother. 7 completed all tests and were included in the analysis.</p> <p>Inclusion criteria: No PTSD symptoms.</p> <p>Setting: Community</p> <p>Geographic location: Laval, Quebec</p> <p>Dates of data collection: NR</p>	<p>Primary findings: % change</p> <p><u>Bar-On Emotional Quotient Inventory: Youth Version (EQ-I:YV)</u></p> <p>Intrapersonal: +6.34%</p> <p>Interpersonal: +9.71%</p> <p>Stress management: +4.24%</p> <p>Adaptability: +4.45%</p> <p>General mood: +3.08%</p> <p>Total: +9.01%</p> <p><u>Beck Youth Inventories of Emotional and Social Impairment</u></p> <p>Self-esteem: +12.44%</p> <p>Anxiety: -13.65%</p> <p>Depression: -11.99%</p> <p>Anger: +7.91%* (negative outcome)</p> <p>Disruptive behaviour: -10.42%</p> <p><u>Grief Scale</u></p> <p>-29.52%</p> <p><u>Children's Hope Scale</u></p> <p>Successful agency: +11.57%</p> <p>Successful pathways: +18.58%</p> <p>Total: +14.85%</p> <p>*Error in the paper. Point change (3.29) rather than percentage change is reported. Corrected here using the authors' formula: [(posttest score – pretest score)/pretest score] × 100.</p> <p>No statistical tests because the sample is too small.</p>	<p>Daigle 2011 (in French) is an overview of support programmes for children bereaved by suicide and a description of two programmes le Programme de thérapie de groupe pour enfants endeuillés par suicide (Laval 'The Group Therapy Program for Children Bereaved by Suicide [PCBS] - Daigle 2012) and Vivre son deuil) with no formal evaluation.</p> <p>Daigle 2012 also includes a theoretical model for the PCBS programme.</p>

	instruments 2-3 weeks prior to programme and 1-2 weeks post programme completion. Quality rating: Fair			
Pfeffer (2002) USA	<p>Study Design: Non-randomised controlled trial. Assigned to treatment/control in alternating order.</p> <p>Study Aim: To evaluate the efficacy of a manual-based bereavement group intervention for children who have suffered suicide of a parent or sibling.</p> <p>Aim of intervention: Group intervention. To promote children's healthy adjustment after family suicide; to help children cope during bereavement after parental or sibling suicide and to reduce morbid outcomes.</p> <p>Type of intervention: 10 weekly 1.5h group sessions of children from 2-5 families per group (age appropriate for children 6-9, 10-12 or 13-15y). Separately but simultaneously to parents. Those who did not receive the intervention could receive other interventions. The 9 retained non-intervention children did not receive any intervention in the community. Psychoeducational components:</p> <ul style="list-style-type: none"> • discussing children's concepts of death and its permanence, • identifying feelings of grief, • defining what is suicide, • discussing why people commit suicide, • discussing prevention of children's suicidal urges, • enhancing children's skills in problem-solving. <p>Supportive components facilitating:</p> <ul style="list-style-type: none"> • children's expressions of grief, 	<p>Sample size: 52 families (75 children). Intervention group: 27 families (39 children). Dropout: 3 families (7 children). Control group: 25 families (36 children). Dropout: 20 families (27 children).</p> <p>Participants: Age range 6-15. <u>Intervention group</u> Assigned Age: M = 9.6, SD = 2.9. 16 boys, 23 girls. Retained Age: M = 9.8, SD = 3.0. 13 boys, 19 girls. <u>Control group:</u> M = 11.4, SD = 3.5; significant difference (p≤0.02) 12 boys, 24 girls. Retained Age: M = 12.2, SD = 3.3; significant difference (p≤0.05). 5 boys, 4 girls.</p> <p>No children witnessed the suicide. Retained children entered the study within the year after death.</p>	<p>Primary findings:</p> <p>Measures: The Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present State (K-SADS-IVR); Beck Depression Inventory (BDI); Children's Depression Inventory (CDI); Revised Children's Manifest Anxiety Scale (RCMAS); Social Adjustment Inventory for Children and Adolescents (SAICA)</p> <p>Reductions in anxiety and depressive symptoms were found among children who received the intervention but not in control children.</p> <p>Anxiety (RCMAS) Outcome Intervention T1: M = 49.3, SD = 9.9. Intervention T2: M = 39.6, SD = 10.6. Control T1: M = 52.6, SD = 6.5. Control T2: M = 56.5, SD = 10.2. T2 retained intervention vs control: $t_{34} = 3.6, p \leq .001$. Younger children (i.e., 6-year-olds) and young adolescents (i.e., 14-year-olds) had less reduction in anxiety than older school-age children (i.e., 11-year-olds)</p> <p><u>Reduction rate¹</u> Significantly greater in intervention (M change = -0.08, SD = 0.11) than control (M change = 0.02, SD = 0.03), $p \leq .01$. <u>Reduction²</u> Significantly greater in intervention (M change = -0.2, SD = 0.2) than control (M change = 0.09, SD = 0.1), $p \leq .004$. <u>Within intervention group³</u> Significant decrease from T1 to T2 ($F_{1,25} = 4.6, p \leq .04$).</p>	<p>Theory based intervention</p> <p>Age and some psychosocial differences between intervention and control group children. Children older than 12 had higher baseline anxiety and depression and younger children (6y) and young adolescents (14 y) had less reduction in anxiety than 11 year olds. A greater dropout of children assigned not to receive (75%) than to receive (18%) intervention led to an imbalance in retention of intervention and non-intervention participants. Retained children were representative of eligible children.</p>

	<ul style="list-style-type: none"> • identification with positive attributes of the deceased, • avoidance of suicidal urges and hopelessness. <p>Data collection methods: Pre and post semi-structured interviews with children using standard instruments to measure psychosocial variables. Time from initial to outcome assessments was 2.5-4.5 months.</p> <p>Quality rating: Fair</p>	<p>Inclusion criteria: Speak English, known cause of death, have a participating parent/caretaker, no clinically estimated intellectual disability, no current psychiatric disorders.</p> <p>Setting: NR (likely community)</p> <p>Geographic location: NR (possibly New York)</p> <p>Dates of data collection: Families identified between Jan 1996 and Nov 1999</p>	<p>Depression (CDI) <u>Outcome</u> Intervention T1: M = 46.5, SD = 8.7. Intervention T2: M = 44.1, SD = 8.7. Control T1: M = 53.7, SD = 11.8. Control T2: M = 53.9, SD = 7.8. T1 retained to intervention versus no intervention: $t_{39} = 2.0, p \leq .05$. T2 retained to intervention versus no intervention: $t_{37} = 2.9, p \leq .006$. Younger children (i.e., 6-year-olds) and young adolescents (i.e., 14-year-olds) had less reduction in depression than older school-age children (i.e., 11-year-olds). <u>Reduction rate¹</u> Significantly greater in intervention (M change = -0.02, SD = 0.06) than control (M change = 0.0009, SD = 0.04), $p \leq .0006$. <u>Reduction²</u> Significantly greater in intervention (M change = -0.05, SD = 0.2) than control (M change = 0.03, SD = 0.2), $p \leq .0003$. <u>Within intervention group³</u> Significant decrease from T1 to T2 ($F_{1,26} = 10.6, p \leq .003$).</p> <p>Posttraumatic stress <u>Outcome</u> Intervention T1: M = 25.1, SD = 12.4. Intervention T2: M = 19.6, SD = 11.4. Control T1: M = 22.1, SD = 7.0. Control T2: M = 17.8, SD = 9.1. No significant differences in T2 scores or rates of change. <u>Within intervention group³</u> Non-significant change ($p \leq .06$).</p> <p>Social adjustment Intervention T1: M = 1.5, SD = 0.3. Intervention T2: M = 1.6, SD = 0.2. Control T1: M = 1.9, SD = 0.4. Control T2: M = 1.8, SD = 0.4.</p>	
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			<p>T1 retained to intervention versus no intervention: $t_{9.6} = 2.3, p \leq .05$. No significant differences in T2 scores or rates of change.</p> <p>No within-group differences in control group.</p> <p>¹ Reduction rate = $(T2-T1)/\text{time from T1 to T2}$. ² Reduction = $(T2-T1)/T1$. ³ Within-group repeated-measures multiple analysis of variance controlling for outcome variable's initial (T1) scores, children's age, age², and time between T1 and T2.</p>	
<p>Veale (2014) Ireland</p>	<p>Study Design: Pre-post</p> <p>Study Aim: to evaluate a group intervention for suicide-bereaved children aged 8-12 years</p> <p>Aim of intervention: To progressively explore the bereavement experience, moving to memories of the loved ones and finally a focus on the future.</p> <p>Type of intervention: Group intervention: community-based bereavement support service. Therapeutic groupwork of 1.5h per week over 12 weeks with art, physical activities worksheets, reflective activities, mindfulness practice. Facilitated by a Child and Adolescent Psychotherapist and one- or two-family workers.</p> <p>Data collection methods: pre-intervention, post-intervention, six months post-intervention and four years post-intervention. Semi-structured 50-minute interviews with parents. Child-centred evaluation of children using dolls, drawings, social network questionnaire and semi-structured interviews.</p> <p>Quality rating: Poor</p>	<p>Sample size: 5 children at pre-post and 6-month follow-up. 3 children retained at 4-year follow-up.</p> <p>Participants: 4 boys, 1 girl aged 8-12. 3 lost a parent, 1 an uncle, 1 a brother and a sister. At 1-4 years post bereavement. All had attended individual counselling.</p> <p>Inclusion criteria: NR</p> <p>Setting: Community</p> <p>Geographic location: Dublin</p> <p>Dates of data collection: NR</p>	<p>Primary findings: Measures: The Child Behaviour Checklist (CBCL, Achenbach, 1991) measured emotional and behavioural problems and social competence.</p> <p>Internalising <u>Pre-intervention</u> 4 children in the clinical range, 1 borderline. <u>Post-intervention</u> <u>6 months</u> 1 child in the clinical range, 2 borderline. <u>4 years</u> All 3 participating children in the normal range.</p> <p>Externalising <u>Pre-intervention</u> 3 children in the clinical range. <u>Post-intervention</u> <u>6 months</u> 2 children in the clinical range. <u>4 years</u> 3 borderline. All 3 participating children in the normal range.</p> <p>Total Behaviour Problem (Internalising and Externalising) <u>Pre-intervention</u> 3 children in the clinical range, 1 borderline.</p>	<p>Model informed by the Barnardo's project 'Talking with children bereaved by suicide' and Winston's Wish's residential programmes.</p>

			<p><u>Post-intervention</u> 2 children in the clinical range. <u>6 months</u> All in the normal range. <u>4 years</u> All 3 participating children in the normal range.</p> <p>Total Competence (activities, school and social competence) <u>Pre-intervention</u> 1 child in the clinical range. <u>Post-intervention</u> All in the normal range. <u>6 months</u> All in the normal range. <u>4 years</u> All 3 participating children in the normal range.</p> <p>Function assessment (task difficulty) No clear pattern. 3 children judged that most or all tasks were easier six months post-intervention.</p> <p>Relationship with parent(s) <u>Pre-intervention</u> 3 children described their relationship as good. <u>Post-intervention</u> 4 children described their relationship as good. <u>6 months</u> 4 children described their relationship as good.</p>	
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Abbreviations: NR = Not Reported; M = Mean; SD = Standard Deviation;

6.3 Quality appraisal

Table 5. Critical appraisal of Pre-Post intervention studies (NHIBI Checklist for Before-After (pre-post) studies with no control group).

Questions	Daigle 2012	Veale 2014
1. Was the study question or objective clearly stated?	Yes	Yes
2. Were eligibility/selection criteria for the study population prespecified and clearly described?	Yes	No
3. Were the participants in the study representative of those who would be eligible for the test/service/intervention in the general or clinical population of interest?	Yes	Yes
4. Were all eligible participants that met the prespecified entry criteria enrolled?	No	NR
5. Was the sample size sufficiently large to provide confidence in the findings?	No	No
6. Was the test/service/intervention clearly described and delivered consistently across the study population?	Yes	Yes
7. Were the outcome measures prespecified, clearly defined, valid, reliable, and assessed consistently across all study participants?	Yes	Yes
8. Were the people assessing the outcomes blinded to the participants' exposures/interventions?	No	No
9. Was the loss to follow-up after baseline 20% or less? Were those lost to follow-up accounted for in the analysis?	No	Yes
10. Did the statistical methods examine changes in outcome measures from before to after the intervention? Were statistical tests done that provided p values for the pre-to-post changes?	No	No
11. Were outcome measures of interest taken multiple times before the intervention and multiple times after the intervention (i.e., did they use an interrupted time-series design)?	No	No
12. If the intervention was conducted at a group level (e.g., a whole hospital, a community, etc.) did the statistical analysis take into account the use of individual-level data to determine effects at the group level?	Yes	No
Overall appraisal comments	Quality: Fair	Quality: Poor

Table 6. Critical appraisal of Non-randomised controlled trials (JBI Checklist for quasi-experimental studies).

Questions	Pfeffer 2002
1. Is it clear in the study what is the 'cause' and what is the 'effect' (i.e. there is no confusion about which variable comes first)?	Yes
2. Were the participants included in any comparisons similar?	No
3. Were the participants included in any comparisons receiving similar treatment/care, other than the exposure or intervention of interest?	Yes
4. Was there a control group?	Yes
5. Were there multiple measurements of the outcome both pre and post the intervention/exposure?	No
6. Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analyzed?	Yes
7. Were the outcomes of participants included in any comparisons measured in the same way?	Yes
8. Were outcomes measured in a reliable way?	Yes
9. Was appropriate statistical analysis used?	Yes
Overall appraisal comments	Quality: Fair

6.4 Information available on request

The protocol, all search strategies, details of excluded studies and individual critical appraisal forms are available from MannMK@cardiff.ac.uk.

7. ADDITIONAL INFORMATION

7.1 Conflicts of interest

The authors declare they have no conflicts of interest to report.

7.2 Acknowledgements

The Health and Care Research Wales Evidence Centre and SURE team would like to thank stakeholders for their involvement, time and expertise in this rapid review process: Claire Cotter, Ann John and Rashmi Kumar.

8. APPENDIX

8.1 APPENDIX 1: Resources searched during Rapid Review Searching

Resource	Number of hits
Database resources searched	
OVID - Medline	118
OVID - PsycInfo	165
ProQuest Social Care ProQuest - Sociology Collection: 1. Applied Social Sciences Index and Abstracts (ASSIA) 2. Sociological Abstracts 3. Social Services Abstracts 4. Sociology Database	42
ASSIA via ProQuest	61
Cinahl via EBSCO Host	140
Scopus via Elsevier	242
Total	768
Total after Deduplication	531
Grey literature websites	
<u>2 Wish</u>	0
<u>Anna Freud National Centre for Children and Families</u>	0
<u>Barnardo's</u>	1
<u>Child Bereavement UK</u>	0
<u>Childhood bereavement Network</u>	1
<u>Childline</u>	0
<u>Children and Young People's Commissioner (Scotland)</u>	0
<u>Children's Commissioner (England)</u>	0
<u>Children's Commissioner (Wales)</u>	0
<u>Cruse</u>	0
<u>Grief Encounter</u>	0
<u>Hope Again (youth site of Cruse)</u>	0
<u>If U Care Share</u>	0
<u>Jigsaw 4 U</u>	0
<u>Mind</u>	0
<u>National Suicide Prevention Alliance</u>	1
<u>National Youth Agency</u>	0
<u>NICCY – Commissioner for Children and Young People (Northern Ireland)</u>	0
<u>NICE</u>	0
<u>NSPCC</u>	0
<u>PAPYRUS UK</u>	0
<u>Royal College of Psychiatrists</u>	0
<u>Samaritans</u>	0
<u>Suicide bereavement UK</u>	0
<u>Support After Suicide Partnership</u>	0
<u>Survivors of Bereavement by Suicide</u>	1
<u>The Children's society</u>	0
<u>Trauma Council</u>	0
<u>UK Government</u>	0
<u>Welsh Government</u>	1
<u>Winston's Wish</u>	0

8.2 APPENDIX 2: Search strategy (OVID Medline)

Ovid MEDLINE(R) ALL <1946 to March 27, 2023>
1 Suicide/ or suicide, completed/ 40095

2 ((take or took or taken) adj2 own life).tw. 62
3 ((self-injur* adj3 death) or (self-injur* adj3 suicide attempt)).mp. [mp=title, book title,
abstract, original title, name of substance word, subject heading word, floating sub-heading
word, keyword heading word, organism supplementary concept word, protocol supplementary
concept word, rare disease supplementary concept word, unique identifier, synonyms,
population supplementary concept word, anatomy supplementary concept word] 93
4 or/1-3 40210
5 (parent* or mother* or mum* or mom* or dad* or father* or caregiver* or grandparent*
or grandmother* or grandfather* or grandpa or grandma).tw. 1183327
6 (family adj2 member*).tw. 113410
7 (sibling* or sister* or brother*).tw. 106848
8 5 or 6 or 7 1355644
9 4 and 8 1942
10 exp Child/ or (child* or adolescen* or teenage* or (young adj person*) or (young adj
people) or youth or (young adj adult*) or student*).tw. 3216990
11 (boy* or girl* or kid* or preteen* or pre teen* or preadolesc* or pre adolesc* or juvenil*
or schoolchild* or teen* or youth or young adolesc* or (young adj boy) or (young adj man) or
(young adj girl) or (young adj woman)).tw. 1036250
12 exp Young Adult/ 1006685
13 10 or 11 or 12 4555515
14 Bereavement/ 6588
15 (grief or griev* or bereav*).tw. 17193
16 mourn*.tw. 2157
17 or/14-16 20148
18 9 and 13 and 17 160
19 (comment or editorial or letter).pt. 2145324
20 18 not 19 159
21 (meta-analysis or meta analysis or review or systematic review).pt. 3289088
22 20 not 21 143
23 limit 22 to (english language and yr="2000 -Current") 118

8.3 APPENDIX 3: Data extraction for additional studies outside the inclusion criteria

Citation (Country)	Study Details	Participants and setting	Key findings	Observations/ notes
<p>Braiden (2009)</p> <p>Northern Ireland</p>	<p>Study Design: Qualitative pre-post</p> <p>Study Aim: To evaluate a residential programme for families bereaved by suicide.</p> <p>Aim of intervention: To enable children bereaved through suicide to develop the coping skills and mechanisms that facilitate their ability to live longer, more productive and less stressful lives than they were likely to have done otherwise. <u>Specifically:</u></p> <ul style="list-style-type: none"> • meet other children bereaved by suicide and share experiences; • develop the skills and confidence to tell their story of how their special person died; • develop an understanding of the grief process and the feelings and emotions associated with complex loss; • explore all emotions, both difficult and positive, and be able to have a sense of their special person that moves beyond the fact that they died by suicide; • develop identified strategies of managing their grief and ways to remember their special person both now and throughout their life; • make new friendships and have fun together. <p>Type of intervention: <u>Programme:</u> Two-day Barnardo's residential designed with practitioners</p>	<p>Sample size: 5 families</p> <p>Participants: 7 adults, 8 children; of whom 6 adults and 6 children participated in the evaluation. <u>Adults:</u> 5 female, 2 male. <u>Children:</u> 6 female, 2 male aged 5-16 years (<i>M</i> = 10 years)</p> <p>Inclusion criteria:</p> <ul style="list-style-type: none"> • directly bereaved through suicide (i.e., a first-degree relative/step-relative); • death occurred at least six months prior to the residential; • aware that their loved one died through suicide; • already received input from the Child Bereavement Service; <p>Setting: Community</p> <p>Geographic location: Northern Ireland</p> <p>Dates of data collection: NR</p>	<p><u>Children</u> all reported that they were glad to have attended and gained greater knowledge. 'Many' had a desire to talk more in the family about their loved one and expressed feelings like 'less alone', 'more confident', 'happier', and had new coping strategies. None reported negative experiences.</p> <ul style="list-style-type: none"> • All of the children reported being very glad to have attended, and of particular importance they felt that their aims had to a large extent been met. • Many agreed to keep in contact with new-found friends and hence potential new supports. • The children expressed that they felt they knew more about the causes of suicide and why people decide to take their own lives • the children reported feeling that their families had benefited from the residential, in that they believed they had been given the opportunity to talk about their loved one and that this would continue in the family home. <p><u>Parents</u> Noted benefits from meeting others, helping their children understand, learning new coping strategies and enabling their family to talk more openly and honestly. No worries were reported. They welcomed the increased access to services for their children, expressed a wish for improved communication within the family ('everything to be out in the open') and appeared to be</p>	<p>Self-reported qualitative outcomes only</p>

	<p>working in the field of child bereavement building on work by Wilson's Wish. <u>Staff:</u> 10 staff (2 social workers, 1 senior social work practitioner, 1 children's services manager, 6 volunteers/project staff).</p> <p>Data collection methods: Qualitative - Pre and post interviews with children and parents. Semi-structured questionnaire for staff.</p>		<p>seeking permission to be happy again. All rated the residential as scoring 9/10.</p> <p><u>Staff</u> Reported a positive experience with a good balance of activities and felt that families benefitted. They suggested allowing more time for families to reflect in future residential.</p>	
<p>Hagstrom (2021) Sweden</p>	<p>Study Design: Narrative evaluation</p> <p>Study Aim: To determine if participation in a grief support camp was meaningful, and what the changes from the programme were.</p> <p>Aim of intervention: To facilitate children's grief.</p> <p>Type of intervention: Grief support camp for families affected by a parent's suicide.</p> <p>Data collection methods: Narrative structured interviews 18 months after participation.</p>	<p>Sample size: 11 children</p> <p>Participants: children aged 6-13 who attended a camp for parental suicide loss.</p> <p>Setting: support camp and interview 18 months later.</p> <p>Geographic location: Sweden.</p> <p>Dates of data collection: children attended the camp twice during 2017-2018 (specific dates not reported).</p>	<p>Primary findings:</p> <p>Before camp- children didn't know anyone else who had lost a parent, tried to keep emotions and thoughts quiet, 2 had been bullied before parents suicide. Lack friends, lots of grief and sadness</p> <p>After- encounters with other suicide bereaved children was most meaningful to feel normal again, helped destigmatize. Expressed relief at having the chance to meet other suicide bereaved children. No longer feel alone. Helpful to talk about grief experience and listen to others. Adjusted coping strategies. Such as first aid boxes- put in tips to manage grief.</p> <p>Valued opportunity to meet other suicide bereaved people. Support exchanged and normalisation. Supports relationship building Previously had struggled alone Felt release from self blame Self esteem appeared restored Potential to combat stigma</p>	<p>Qualitative narratives. Some from children, some views from parents.</p> <p>Shown to help open up family communication and strengthen family resources for coping</p> <p>Potential to counteract complications</p>
<p>McClatchey (2012) US</p>	<p>Study Design: Phenomenological</p> <p>Study Aim: To examine what part or parts of the Camp MAGIK interventions were</p>	<p>Sample size: 13 families: 19 children and 13 parents/guardians.</p>	<p>The group sessions were useful for making connections with other children who had similar experiences. It helped to alleviate the feeling of loneliness because non-parentally</p>	<p>Qualitative narratives.</p> <p>No comparison group.</p>

	<p>most responsible for the change in the campers.</p> <p>Aim of intervention: To examine the healing phenomena of the experience of camp.</p> <p>Type of intervention: Bereavement camp.</p> <p>Data collection methods: Semi-structured interviews.</p>	<p>Participants: children aged 8-18, of whom 8 were teenagers. 8 Black, 3 Latino, 8 White. Two suicide deaths of parents (participants aged 16 and 17).</p> <p>Setting: bereavement camp. Interviews conducted at participants' homes.</p> <p>Geographic location: Georgia, US (https://www.campmagik.org/)</p> <p>Dates of data collection: camp attended in autumn 2009 or spring 2010.</p>	<p>bereaved peers did not understand the experience.</p> <p>The intervention supported participants in facing their grief instead of pushing it away.</p> <p>Facilitators being supportive and understanding was an important aspect of the intervention.</p>	<p>Small sample size from one geographical area.</p> <p>Only 2 children of the 19 were bereaved by suicide.</p> <p>PI is the founder of camp MAGIK, steps taken to limit bias by using a co-PI not directly involved to oversee research.</p>
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8.4 APPENDIX 4: Full list of excluded studies

Table 7. Excluded studies from database searches

<ol style="list-style-type: none"> 1. Andriessen, Karl, Karolina Krysinska, and Onja T. Grad. 2017. "Postvention in action: The international handbook of suicide bereavement support." <i>Postvention in action: The international handbook of suicide bereavement support</i>. doi: https://dx.doi.org/10.1027/00493-000. WRONG PUBLICATION 2. Andriessen, Karl, Karolina Krysinska, Debra Rickwood, and Jane Pirkis. 2022. "'Finding a safe space': A qualitative study of what makes help helpful for adolescents bereaved by suicide." <i>Death Studies</i> 46 (10):2456-2466. doi: 10.1080/07481187.2021.1970049. WRONG STUDY DESIGN 3. Andriessen, K., K. Krysinska, D. Rickwood, and J. Pirkis. 2022. "The Reactions of Adolescents, Parents and Clinicians to Participating in Qualitative Research Interviews Regarding Adolescents Bereaved by Suicide and Other Traumatic Death." <i>International Journal of Environmental Research & Public Health [Electronic Resource]</i> 19 (1):01. WRONG STUDY DESIGN AND WRONG POPULATION 4. Andriessen, Karl, Elizabeth Lobb, Jane Mowll, Michael Dudley, Brian Draper, and Philip B. Mitchell. 2019. "Help-seeking experiences of bereaved adolescents: A qualitative study." <i>Death Studies</i> 43 (1):1-8. doi: 10.1080/07481187.2018.1426657. POPULATION and WRONG STUDY DESIGN 5. Baggerly, Jennifer, and Salma Elkadi Abugideiri. 2010. "Grief Counseling for Muslim Preschool and Elementary School Children." <i>Journal of Multicultural Counseling and Development</i> 38 (2):112-124. WRONG POPULATION 6. Bisagni, Francesco. 2012. "Shrapnel: Latency, mourning and the suicide of a parent." <i>Journal of Child Psychotherapy</i> 38 (1):22-31. doi: https://dx.doi.org/10.1080/0075417X.2011.651840. 7. Bisagni, F. 2022. "LET ME GO: Depression and suicidal fantasies in children1." <i>Journal of Analytical Psychology</i> 67 (4):939-961. doi: 10.1111/1468-5922.12855. POPULATION and WRONG STUDY DESIGN 8. Braiden, Hannah Jane, Monica McCann, Helen Barry, and Carrie Lindsay. 2009. "Piloting a therapeutic residential for children, young people and families bereaved through suicide in Northern Ireland." <i>Child Care in Practice</i> 15 (2):81-93. doi: https://dx.doi.org/10.1080/13575270802685344. WRONG STUDY DESIGN (Noted as additional studies outside the inclusion criteria) 9. Brewer, Joanne, and Andrew C. Sparkes. 2011. "Parentally bereaved children and posttraumatic growth: Insights from an ethnographic study of a UK childhood bereavement service." <i>Mortality</i> 16 (3):204-222. doi: 10.1080/13576275.2011.586164. WRONG STUDY DESIGN

10. Briggs, Stephen, Mark J. Goldblatt, Reinhard Lindner, John T. Maltzberger, and Georg Fiedler. 2012. "Suicide and trauma: A case discussion." *Psychoanalytic Psychotherapy* 26 (1):13-33. doi: 10.1080/02668734.2011.652657. WRONG STUDY DESIGN
11. Brown, Ana C., Irwin N. Sandler, Jenn-Yun Tein, Xianchen Liu, and Rachel A. Haine. 2007. "Implications of parental suicide and violent death for promotion of resilience of parentally-bereaved children." *Death Studies* 31 (4):301-335. WRONG STUDY DESIGN
12. Cohen, J. A., and A. P. Mannarino. 2011. "Trauma-focused CBT for traumatic grief in military children." *Journal of Contemporary Psychotherapy* 41 (4):219-227. doi: 10.1007/s10879-011-9178-0. WRONG STUDY DESIGN
13. Cutrer-Párraga, E. A., C. Cotton, M. A. Heath, E. E. Miller, T. A. Young, and S. N. Wilson. 2022. "Three Sibling Survivors' Perspectives of their Father's Suicide: Implications for Postvention Support." *Journal of Child and Family Studies* 31 (7):1838-1858. doi: 10.1007/s10826-022-02308-y. WRONG STUDY DESIGN
14. Dyregrov, Kari. 2009. "How do the young suicide survivors wish to be met by psychologists? A user study." *Omega: Journal of Death and Dying* 59 (3):221-238. WRONG STUDY DESIGN
15. Dyregrov, Kari. 2009. "The important role of the school following suicide in Norway. What support do young people wish that school could provide." *Omega: Journal of Death and Dying* 59 (2):147-161. WRONG STUDY DESIGN
16. Dyregrov, K., and A. Dyregrov. 2005. "Siblings after suicide - "The forgotten bereaved"." *Suicide and Life-Threatening Behavior* 35 (6):714-724. doi: 10.1521/suli.2005.35.6.714.
17. Gallo, Cornelia L., and Cynthia R. Pfeffer. 2003. "Children and adolescents bereaved by a suicidal death: Implications for psychosocial outcomes and interventions." *Suicide in children and adolescents*:294-312. doi: <https://dx.doi.org/10.1017/CBO9780511550423.014>. WRONG STUDY DESIGN and WRONG PUBLICATION DATE
18. Goodman, Susan. 2013. "Traumatic loss and developmental interruption in adolescence: An integrative approach." *Journal of Infant, Child & Adolescent Psychotherapy* 12 (2):72-83. doi: <https://dx.doi.org/10.1080/15289168.2013.791150>. WRONG PUBLICATION TYPE
19. Hagstrom, A.S. 2014. ""The self-murderer from Orminge": A bereaved daughter's remonstrance to "rescue" her Self through a performed memoir of revolt." *Narrative Inquiry* 24 (2):218-238. WRONG PUBLICATION TYPE
20. Hagström, A. S. 2021. "A Narrative Evaluation of a Grief Support Camp for Families Affected by a Parent's Suicide." *Frontiers in Psychiatry* 12. doi: 10.3389/fpsy.2021.783066. WRONG STUDY DESIGN (Noted as additional studies outside the inclusion criteria)
21. Henry, M., and B. J. Greenfield. 2009. "Therapeutic effects of psychological autopsies." *Crisis: Journal of Crisis Intervention & Suicide* 30 (1):20-4. WRONG POPULATION
22. Jackson, D., K. Peters, and G. Murphy. 2015. "Suicide of a close family member through the eyes of a child: A narrative case study report." *Journal of Child Health Care* 19 (4):495-503. WRONG POPULATION and WRONG STUDY DESIGN
23. Lindqvist, P., L. Johansson, and U. Karlsson. 2008. "In the aftermath of teenage suicide: a qualitative study of the psychosocial consequences for the surviving family members." *BMC Psychiatry* 8:26. POPULATION and WRONG STUDY DESIGN
24. Loy, Marty, and Amy Boelk. 2014. "Losing a parent to suicide: Using lived experiences to inform bereavement counseling." (2014) *Losing a parent to suicide: Using lived experiences to inform bereavement counseling* x, 209 pp New York, NY, US: Routledge/Taylor & Francis Group; US.
25. McClatchey IS, and Wimmer JS. Healing components of a bereavement camp: children and adolescents give voice to their experiences. *Omega J Death Dying*. 2012;65(1):11–32. doi:[10.2190/OM.65.1.b](https://doi.org/10.2190/OM.65.1.b). WRONG STUDY DESIGN (Noted as additional studies outside the inclusion criteria)
26. Mead, Jessica. 2020. "Competing Developmental Demands Among Suicide-Bereaved Emerging Adults." *Omega: Journal of Death & Dying* 81 (1):155-169. doi: 10.1177/0030222818764528. WRONG POPULATION and WRONG STUDY DESIGN
27. Mitchell, Ann M., Sue Wesner, Linda Garand, Deborah Dysart Gale, Allyson Havill, and Lynn Brownson. 2007. "A Support Group Intervention for Children Bereaved by Parental Suicide." *Journal of Child and Adolescent Psychiatric Nursing* 20 (1):3-13. doi: <https://dx.doi.org/10.1111/j.1744-6171.2007.00073.x>. WRONG PUBLICATION TYPE and WRONG STUDY DESIGN
28. Myers-Coffman, Katherine, Felicity A. Baker, and Joke Bradt. 2020. "The Resilience Songwriting Program: A working theoretical model and intervention protocol for adolescent bereavement." *Nordic Journal of Music Therapy* 29 (2):132-149. doi: 10.1080/08098131.2019.1642373. WRONG PUBLICATION TYPE and WRONG STUDY DESIGN
29. Pettersen, Rossana. 2022. "Suicide in the family: Towards improved care of bereaved parents and siblings." *Dissertation Abstracts International: Section B: The Sciences and Engineering* 83 (5):No-Specified. WRONG POPULATION

30. Pettersen, R., P. Omerov, G. Steineck, A. Dyregrov, D. Titelman, K. Dyregrov, and U. Nyberg. 2015. "Suicide-bereaved siblings' perception of health services." *Death Studies* 39 (6):323-31. WRONG POPULATION
31. Roitman, Yaakov. 2021. "A play for a bereaved brother: Mutually playing with the child survivor of a sibling suicide." *Journal of Child Psychotherapy* 47 (3):402-414. doi: <https://dx.doi.org/10.1080/0075417X.2021.2015797>. WRONG STUDY DESIGN
32. Ross, A. M., K. Krysinska, D. Rickwood, J. Pirkis, and K. Andriessen. 2021. "How best to provide help to bereaved adolescents: a Delphi consensus study." *BMC Psychiatry* 21 (1):591. WRONG OUTCOME and WRONG STUDY DESIGN
33. Ross, Anna M., Karolina Krysinska, Debra Rickwood, Jane Pirkis, and Karl Andriessen. 2022. ""How best to provide help to bereaved adolescents: A Delphi consensus study": Correction." *BMC Psychiatry* 22. doi: <https://dx.doi.org/10.1186/s12888-021-03635-y>. WRONG OUTCOME
34. Sandler, I., J. Y. Tein, S. Wolchik, and T. S. Ayers. 2016. "The Effects of the Family Bereavement Program to Reduce Suicide Ideation and/or Attempts of Parentally Bereaved Children Six and Fifteen Years Later." *Suicide & Life-Threatening Behavior* 46:S32-8. WRONG POPULATION
35. Schreiber, J. K., D. C. Sands, and J. R. Jordan. 2017. "The Perceived Experience of Children Bereaved by Parental Suicide." *Omega - Journal of Death & Dying* 75 (2):184-206. WRONG STUDY DESIGN
36. Spillane, A., K. Matvienko-Sikar, C. Larkin, P. Corcoran, and E. Arensman. 2018. "What are the physical and psychological health effects of suicide bereavement on family members? An observational and interview mixed-methods study in Ireland." *BMJ Open* 8 (1):e019472. WRONG STUDY DESIGN (Noted as additional studies outside the inclusion criteria)
37. Spuij, M., M. Dekovic, and P. A. Boelen. 2015. "An open trial of 'grief-help': a cognitive-behavioural treatment for prolonged grief in children and adolescents." *Clinical Psychology & Psychotherapy* 22 (2):185-92. Wrong demographic (RIGHT AGE & GRIEF FOCUSED BUT NOT SUICIDE SPECIFIC)
38. Stikkelbroek, Yvonne, Denise Bodden, Ellen Reitz, Wilma Vollebergh, and Anneloes Baar. 2016. "Mental health of adolescents before and after the death of a parent or sibling." *European Child & Adolescent Psychiatry* 25 (1):49-59. doi: 10.1007/s00787-015-0695-3. WRONG STUDY DESIGN
39. Thomas, Sandra P. 2003. "From the editor--"Why did he do it?" Confronting issues of suicide and bereavement." *Issues in Mental Health Nursing* 24 (1):1-3. doi: <https://dx.doi.org/10.1080/01612840305304>. WRONG PUBLICATION TYPE
40. Tillman, Kathleen S., and Michael Prazak. 2018. "Kids supporting kids: A 10-week small group curriculum for grief and loss in schools." *Counselling & Psychotherapy Research* 18 (4):395-401. doi: 10.1002/capr.12190. WRONG POPULATION
41. Visser, Renske C., and Fiona R. Parrott. 2015. "Stability and change: the role of keepsakes and family homes in the lives of parentally bereaved young adults in the Netherlands." *Mortality* 20 (1):19-35. doi: <https://doi.org/10.1080/13576275.2014.958450>. WRONG POPULATION
42. Watson, C., E. A. Cutrer-Párraga, M. Heath, S. Wilson, E. E. Miller, and T. A. Young. 2021. "Very young child survivors' perceptions of their father's suicide: Exploring bibliotherapy as postvention support." *International Journal of Environmental Research and Public Health* 18 (21). doi: 10.3390/ijerph182111384. WRONG POPULATION (INTERVENTION DELIVERED TO ADULTS)
43. Willems, Liselot, and Leen Hoebrechts. 2017. "Belgium - Support groups for children and adolescents bereaved by suicide." *Postvention in action: The international handbook of suicide bereavement support*:314-319. WRONG PUBLICATION TYPE
44. Williams, J. L., M. M. Hardt, A. V. Henschel, and L. Jobe-Shields. 2020. "Anxiety sensitivity moderates the association between peritraumatic distress and bereavement outcomes among sudden loss survivors." *Journal of Nervous and Mental Disease* 208 (11):863-869. doi: 10.1097/NMD.0000000000001217. WRONG STUDY DESIGN
45. Wong, Paul W. C., Wincy S. C. Chan, Philip S. L. Beh, Fiona W. S. Yau, Paul S. F. Yip, and Keith Hawton. 2010. "Research participation experiences of informants of suicide and control cases: Taken from a case-control psychological autopsy study of people who died by suicide." *Crisis: The Journal of Crisis Intervention and Suicide Prevention* 31 (5):238-246. doi: <https://dx.doi.org/10.1027/0227-5910/a000025>. WRONG STUDY DESIGN
46. Zhang, N., I. Sandler, J. Y. Tein, and S. Wolchik. 2023. "Reducing suicide risk in parentally bereaved youth through promoting effective parenting: testing a developmental cascade model." *Development & Psychopathology* 35 (1):433-446. WRONG POPULATION

Table 8. Excluded studies from grey literature searches

Barnardo's	An overview of evidence-based interventions – For children and young people experiencing bereavement, loss and grief. https://www.barnardos.org.uk/sites/default/files/2021-02/MHF%20Scotland%20Mapping%20interventions%20bereavment.pdf - Wrong population (not suicide specific)
National Suicide Prevention Alliance	Suicide bereavement in the UK: Descriptive findings from a national survey https://nspa.org.uk/wp-content/uploads/2022/05/Suicide-bereavement-in-the-UK.pdf - wrong population
Welsh Government	A Scoping Survey of Bereavement Services in Wales end of study report https://www.gov.wales/sites/default/files/publications/2019-12/scoping-survey-of-bereavement-services-in-wales-report.pdf?_ga=2.44440038.39583088.1679048462-5037011.1679048462 - wrong population

Table 9. Excluded studies unpicked from secondary research

Andriessen, K., et al., Effectiveness of interventions for people bereaved through suicide: a systematic review of controlled studies of grief, psychosocial and suicide-related outcomes. BMC psychiatry, 2019. 19(1): p. 49.	Battle (1984) – Wrong population (includes 14-24 year-olds but is not aimed for young people, pre-2000)
	Constantino & Brick (1996) – Wrong time period (intervention for widows, pre-2000)
	Constantino et al. (2001) – Wrong population (intervention for widows)
	De Groot et al. (2007) – Wrong population (includes 15-24 year-olds but is not aimed for young people)
	De Groot et al. (2010) – Wrong population (includes 15-24 year-olds but is not aimed for young people)
	Farberow (1992) – Wrong population and time period (intervention for adults (18+), pre-2000)
	Hazell & Lewin (1993) – Wrong population and time period (peer suicide, pre-2000)
	Kovac & Range (2000) – Wrong population (not clear if family suicide)
Bergman, A.S., U. Axberg, and Hanson, E. When a parent dies - a systematic review of the effects of support programs for parentally bereaved children and their caregivers. BMC palliative care	Sandor et al. (1994) – Wrong time period (pre-2000)
	Wittouck et al. (2014) – Wrong population (intervention for adults)
	Zisook et al. (2018) – Wrong population (intervention for adults)
	Schilling et al. (1992) – Wrong time period (pre-2000)
	McClatchey et al. (2009) – Wrong population (does not specify if suicide)
	McClatchey & Wimmer (2012) – Wrong study design (qualitative)
	Kalantari et al. (2012) – Wrong population (not suicide)
Black & Urbanowicz (1985); Wrong time period - pre-2000.	

	Christ et al. (2005) – Wrong population (not suicide.)
	Sandler et al. (1992) – Wrong time period (pre-2000)
	Hagan et al. (2012) – Wrong population (not specific to suicide)
	Sandler et al. (2003) – Wrong population (not specific to suicide)
	Schmiege et al. (2006) – Wrong population (not specific to suicide)
	Tein et al. (2006) – Wrong population (not specific to suicide)
	Sandler et al. (2010a) – Wrong population (not specific to suicide)
	Sandler et al. (2010b) – Wrong population (not specific to suicide)
	Luecken et al. (2010) – Wrong population (not specific to suicide)
	Luecken et al. (2014) – Wrong population (not specific to suicide)
	Schoenfelder et al. (2013) – Wrong population (not specific to suicide)
Chen, C.Y.-C. and A. Panebianco, Interventions for Young Bereaved Children: A Systematic Review an Implications for School Mental Health Providers. Child & Youth Care Forum, 2018. 47(2): p. 151-171.	Black and Urbanowicz (1987) – Wrong time period (pre-2000)
	Braiden et al (2009) – Wrong study design (qualitative)
	Brown et al (2004) - Wrong population (one child, not suicide)
	Chilcote (2007) - Wrong population (not suicide)
	Donovan et al (1995) - Wrong time period (pre-2000)
	Glazer (1998) - Wrong time period (pre-2000)
	Glazer and Clark (1999) - Wrong time period (pre-2000)
	Johnson (2014) – Wrong study design (case study)
	Miller (2010) - Wrong population (only one child bereaved by suicide, data not extractable)
	Muir et al (1988) - Wrong time period (pre-2000)
	Siddaway et al (2015) - Wrong population (not specific to suicide)
	Stubenbort et al (2001) - Wrong population (not suicide)
	Vargas-Irwin (1999) - Wrong time period (pre-2000)
	Webb-Ferebee (2003) - Wrong population (not death by suicide, child death not adult)
	Wilson (1995) - Wrong time period (pre-2000)
Zeanah and Burk (1984) - Wrong time period (pre-2000)	

	Zelenko and Benham (2002) - Wrong population (not death by suicide)
Hua, P., L. Bugeja, and M. Maple, A systematic review on the relationship between childhood exposure to external cause parental death, including suicide, on subsequent suicidal behaviour. <i>Journal of Affective Disorders</i> , 2019. 257: p. 723-734.	Blum et al. (2012) - Wrong study design (no intervention)
	Demi et al. (1991) - Wrong time period (pre-2000)
	Goldston et al. (2016) - Wrong study design (no intervention)
	Gravseth et al. (2012) - Wrong study design (no intervention)
	Hagstrom (2019), (2017) - Wrong study design (no intervention)
	Kasahara-Kiritani et al. (2017) - Wrong study design (no intervention)
	Lee et al (2018) - Wrong study design (no intervention)
	Ratnarajah et al. (2014), (2008) - Wrong study design (no intervention)
	Saarinen et al. (2000) - Wrong study design (no intervention)
	Shepard and Barraclough (1976) - Wrong time period (pre-2000)
	Brewer et al. (2011) - Wrong study design (no intervention)
	Burrell et al (2017) - Wrong study design (no intervention)
	Carr et al (2019) - Wrong study design (no intervention)
	Guldin et al (2015) - Wrong study design (no intervention)
	Hoeg et al (2018) - Wrong study design (no intervention)
	Jakobsen et al (2011) - Wrong study design (no intervention)
	Kuramoto et al (2013) - Wrong study design (no intervention)
	Mittendorfer-Rutz et al (2012) - Wrong study design (no intervention)
Niederkrotenthaler et al. (2012) - Wrong study design (no intervention)	
Rostila et al (2016) - Wrong study design (no intervention)	
Wolchik et al (2009) - Wrong study design (no intervention)	
Kaspersen, S.L., et al., <i>Use of Health Services and Support Resources by Immediate Family Members Bereaved by Suicide: A Scoping Review</i> . <i>International journal of environmental research and public health</i> , 2022. 19(16).	Adriessen et al (2021) - Wrong study design
	Adriessen et al (2019) - Wrong population and study design
	Hagstrom (2017) - Wrong study design
	Hagstrom (2017) - Wrong study design (no intervention)
	Hagstrom (2021) - Wrong study design (qualitative)
	Bachman B. (2013) - Wrong population (not suicide specific)

Ridley, A. and S. Frache, Bereavement care interventions for children under the age of 18 following the death of a sibling: a systematic review. Palliative medicine, 2020. 34(10): p. 269216320947951.

Bugge KE et al. (2012) - Wrong population (not suicide specific)
Creed J et al (2001) - Wrong population (not suicide specific)
Davies B et al. (2007) - Wrong population (not suicide)
DeCinque N et al. (2004) - Wrong population (not suicide)
Greenwald N et al (2017) - Wrong population (not suicide)
Griese B et al. (2017) - Wrong study design (not intervention)
Griese B et al. (2018) - Wrong population (not suicide specific)
Hanlon P et al. (2018) - Wrong population (not suicide specific)
Kramer R. (2002) - Wrong population (not suicide specific)
Lydon A et al. (2010) - Wrong population (not suicide specific)
McClatchey IS (2018) - Wrong publication type (literature review)
Packman W et al. (2005) - Wrong population (not suicide specific)
Packman W et al. (2008) - Wrong population (not suicide specific)
Rachamim L. (2017) - Wrong population (not suicide specific)
Richardson RA et al. (2017) - Wrong population (not suicide specific)
Rolls L and Payne S. (2003) - Wrong population (focus on providers not users)
Siddaway AP et al. (2015) - Wrong population (not suicide specific)
Sirkiä K et al. (2000) - Wrong population (not suicide specific)
Spuij M et al. (2013) - Wrong population (not suicide specific)
Suc A et al. (2013) - Wrong population (French article, intervention is not suicide specific.)
Thienprayoon R et al. (2015) - Wrong population (not suicide specific)
Wilkinson S et al. (2007) - Wrong population (not suicide specific)



The Health and Care Research Wales Evidence Centre

Our dedicated team works together with Welsh Government, the NHS, social care, research institutions and the public to deliver vital research to tackle health and social care challenges facing Wales.

Funded by Welsh Government, through Health and Care Research Wales, the Evidence Centre answers key questions to improve health and social care policy and provision across Wales.

Along with our collaborating partners, we conduct reviews of existing evidence and new research, to inform policy and practice needs, with a focus on ensuring real-world impact and public benefit that reaches everyone.

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