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Abbate, L, Chopra, J, Poole, H and Saini, P (2022) Evaluating postvention services and the acceptability of models of postvention: a systematic review. Omega: Journal of Death and Dying. ISSN 0030-2228

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Evaluating Postvention Services and the Acceptability of Models of Postvention: A Systematic Review

OMEGA—Journal of Death and Dying 2022, Vol. 0(0) 1–41 © The Author(s) 2022 © U u u

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Abstract

Background: Suicide is a major public health issue that increases the risk of suicide for those bereaved by suicide themselves. There is a lack of evaluation of the effectiveness and acceptability of suicide postvention services supporting those bereaved by suicide.

Aims: This review aimed to assess evaluations of postvention services supporting those bereaved by suicide and the acceptability of methods of postvention.

Methods: Searches of peer-reviewed literature identified 36 studies for inclusion. 22 studies evaluated specific postvention services, 14 evaluated models of postvention.

Results: Using the Mixed Methods Appraisal Tool, mixed-methods and qualitative postvention evaluation and acceptability research produce high-quality studies. Studies rated as low quality reflect poor reporting, rather than ineffective services.

Conclusion: Further evaluation of community-based postvention services within the UK is needed. This would evidence that services in the UK are effective in supporting those bereaved by suicide. Evaluation would benefit services in accessing funding, improve service development and provide holistic support.

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Keywords

suicide, postvention, bereavement, evaluation, systematic review

Introduction

Globally, 800,000 people die by suicide every year – one death every 40 seconds (World Health Organisation, 2019). According to the most recent published data in England and Wales in 2019, there were 5691 registered suicides, 11 deaths per 100,000 population (Office for National Statistics, 2020).

The Centre for Mental Health's 'Zero suicides' report suggested that "the economic and social cost of one suicide is estimated at £1.5 million" (Centre for Mental Health, 2015). For every suicide, it has been estimated that 135 people are directly affected (Cerel et al., 2019). It is thought that exposure to suicide is on a continuum with some people directly exposed or witness to a suicide, some directly or indirectly affected, and some bereaved (Cerel et al., 2014). The continuum defines individuals exposed to suicide as "anyone who knows or identifies with someone who dies by suicide," and stresses that this no longer merely just focuses on kin or those who were exposed to the trauma of the death itself but focus on all of those who may be affected by a suicide (Cerel et al., 2014, p. 4).

Pitman et al. (2016) found that people bereaved by suicide are 65% more likely to attempt suicide than people who are bereaved by natural causes, increasing the absolute risk to 1 in 10. Furthermore, regardless of whether the participants were blood-related to the deceased, the effects of suicide bereavement were similar. These findings suggest that bereavement by suicide is a risk factor for a suicide attempt and its effects are not confined to immediate family members and thus, suicide bereavement effects wider support networks.

A study investigating suicide deaths in 10–19-year-olds (n = 595) between 2014-2016, using inquest information found that 9% (n = 51) had been bereaved by suicide (Rodway et al., 2020). Bartik et al. (2020) study of 18-year-olds who had experienced a friend's suicide in rural Australia found that young people exposed to a friend's suicide experienced significantly high levels of depression, anxiety and maladaptive coping strategies such as alcohol use. Those identifying themselves as "close friends" were at less risk of suicide but displayed increased mental health concerns as a result of their friend's death. Those identifying themselves as "peripheral friends" were at a greater risk of suicide. However, the limitations of this study suggest that the sampling was open to selection bias, there was a distinct lack of randomisation and the small sample size had insufficient statistical power to meet requirements of quantitative method deduction, and the sample were not re-tested and therefore, results only capture participant's experience from one point in time. Pitman et al. (2014) found an increased risk of psychiatric admission for parents bereaved by the suicide of their child. Additionally, the suicide of a child places parents at greater risk of psychological morbidity

and physical health problems such as poor diet and smoking, compared to other causes of death (Erangsen & Pitman, 2017; Pitman et al., 2014).

The process of an intervention post-suicide was acknowledged by Edwin Schneidman, as "postvention is the prevention for the next generation" (Cain, 1972, pg. x). Postvention is a process which alleviates the effects of stress and aids in coping with a death by suicide. Professionals working with people bereaved by suicide noted that people they characterise their grief as a unique experience requiring specific intervention (Schuyler, 1973; Batzler, 1988; Knight, 1992). Harwood et al. (2002) reported that individuals bereaved by suicide felt highly distressed by legal procedures, specifically the coroner's office and the inquest. Similar levels of distress were caused by the media reporting on the suicide, therefore postvention support should adapt to meet each individual bereaved person's needs.

Andriessen et al. (2017) suggested that postvention research should focus on increasing intercultural collaboration and theory-driven research whilst encouraging relationships between research and practice. Furthermore, Campbell et al. (2004, p. 31.) suggested that "an essential ingredient for successful implementation... is acceptance or buy-in by various police departments... and coroners", therefore it is crucial that services collaborate with statutory services that are involved in suicide bereavement. McGeechan et al. (2018) compared police and coroner-led postvention strategies and found that coroners were more consistent at identifying suspected suicides however cases were filed quicker by the police. Bereaved individuals were more willing to share contact details and consent to referrals with police, which led to increased referrals. This research highlighted a need to look at components of successful postvention services, such as referral sources and collaboration.

McDaid et al. (2008) conducted a systematic review into the interventions for adults and children bereaved by suicide. They included support groups, self-help, volunteer-led groups and therapeutic interventions led by health professionals. This study exclusively included randomised controlled trials and studies with a control or comparison group such as cohort studies. Eight studies were identified, none being UK-based. Findings suggested that when compared with no intervention, there was evidence of effectiveness for four sessions of cognitive-behavioural family interventions with a psychiatric nurse. They also found that a psychologist-led 10-week bereavement group intervention was beneficial for children. Finally, an 8-week group therapy delivered by a mental health professional or volunteer was beneficial to adults. They concluded that all but one study had "substantial methodological limitations".

More recently, Andriessen et al. (2019) conducted a systematic review into the effectiveness of interventions for people bereaved through suicide. The studies included (n = 11) were controlled studies of grief, psychosocial and suicide-related outcomes. The inclusion criteria included: study population consisting of people bereaved by suicide, studies needed to provide empirical data on grief, mental health and/or suicide-related outcomes, studies involving a controlled intervention and finally, studies needed to have been published in a peer-reviewed journal. This review excluded

studies without a control group, case studies and review papers. No qualitative studies met the inclusion criteria. Location of origin included USA (n = 8), the Netherlands (n = 3), Australia (n = 3) and Belgium (n = 3). Across the studies, intervention modalities vary. The quality of studies was weak as evidence of the effectiveness of complicated grief interventions was lacking. The diversity of intervention settings, populations and measures used contributed to the overall quality of the studies. Furthermore, the studies had limited replicability and none of the studies looked at suicidal behaviour as an outcome. Studies that did have an interview follow-up period utilised short time points. Studies had small sample sizes, were female dominated samples, and it is unknown if studies controlled for effects of other treatments. This review highlighted concerns of selection bias, blinding and high withdrawal and dropouts as the weakest components across the studies. However, there was some evidence of the effectiveness of interventions for uncomplicated grief (Andriessen et al., 2019).

The majority of postvention research is conducted elsewhere in the world, and rarely conducted in the UK despite multiple postvention services supporting people bereaved by suicide in the UK, suggesting a need for postvention research in the UK. Two studies highlighted that mixed methodology studies were more effective in identifying insights through qualitative interviews that cannot be discovered using quantitative methods (Jordan, 2001; Jordan & McMenamy, 2004). Quantitative methods are limited in teasing out how contexts of postvention impact the outcomes. Qualitative methods, specifically the phenomenological approach, which seeks to understand the lived experience of the respondents, are inherently designed to assess a phenomenon in its natural setting and context (Moustakas, 1994). Andriessen & Krysinska (2012) posed essential questions on suicide bereavement and postvention and conclude that "the voice of survivors should be included in public health policies related to suicide prevention as well as involved in design and implementation of postvention programs and studies" (p. 29). Therefore, conducting a systematic review that considers non-controlled studies that assess the effectiveness of suicide bereavement support interventions is crucial. This will help to determine whether a non-controlled approach yields stronger quality of studies that also allow us to gain insight into the experience of being bereaved by suicide, creating services that provide a good standard of support. No recent reviews have included non-controlled and qualitative studies.

This systematic review has two aims, firstly to assess research which evaluates postvention services supporting those bereaved by suicide and secondly it aims to assess the acceptability of methods of postvention in terms of community support, peer support, group support and internet support.

The objectives in this review are to:

- 1. Identify and assess international research which evaluates postvention services and methods of postvention
- 2. Examine evidence for suicide postvention services that aim to prevent suicide
- Examine and identify outcomes used to evaluate the effectiveness of suicide postvention services
- 4. Identify components of effective suicide postvention services

Method

Review Questions

- 1. How do suicide postvention services support those bereaved by suicide?
- 2. What outcomes are used to assess the effectiveness of postvention services?
- 3. How effective are suicide postvention services in supporting those bereaved by suicide?
- 4. Can effectiveness of these services be measured and quantified?

Literature Search

Electronic databases were searched to identify relevant published studies that met the inclusion criteria for this systematic review. The databases included were: PSYCINFO, CINAHL, MEDLINE, Scopus, Web of Science, Science Direct, EMBASE, TRIP, Cochrane Library, AMED and Google Scholar.

General searches were then supplemented with more specific searches for postvention services or interventions. Lateral search techniques were then implemented to search through citations used in primary studies and other systematic reviews.

Search Terms

- (1) Suicid* OR "taking your own life"
- (2) Postvention OR support OR counselling OR counseling OR "peer support" OR "support service*" OR "self-help group" OR "postvention liaison service*" OR liaison
- (3) Bereave* OR grief OR mourning
- (4) Effectiveness OR impact OR acceptability

Inclusion Criteria

Qualitative and quantitative peer-review studies. This included interviews, focus groups, intervention studies, and experimental designs and process evaluations. Studies focusing on suicide postvention were included. No geographical restrictions were applied. Postvention services offering support to adults and children were considered. Any relationship to the deceased was included, such as studies that evaluate services that offered support to any relative or friend. As those accessing support services may be experiencing mental health issues, studies including those individuals as participant groups were included. Studies were included if they reported on suicide postvention services and their effectiveness and the acceptability of a method of postvention. As the goal of most suicide postvention services is to prevent suicide, suicide-related outcomes were the primary outcome of interest, postvention studies will also be included if

they measure other mental health or well-being change such as self-harm, psychological factors. Peer support groups were also considered.

Exclusion Criteria

Studies reporting on prevention services and therapeutic interventions were not included, as this review focuses on postvention services. Studies and grey literature written in other languages that had not been translated into English were not considered.

Comparator/Control

Some studies included within this review compared intervention outcome with a control group or treatment-as-usual, another intervention or no intervention group.

Screening

Electronic search results were downloaded into Microsoft Excel (n = 2808). Duplicates were then removed (n = 890). Titles and abstracts were screened against the inclusion criteria (n = 1918). Systematic reviews and policy/practice guidance documents were screened for primary studies. One researcher then screened full papers, with the rest of the research team screening 1/3 of the full papers each. Any disagreements at this stage were blindly assessed by a different member of the research team and discussed. Full papers were then screened (n = 315). The final number (n = 36) of studies included were then agreed upon, rejecting studies which were not written in English, evaluated counselling interventions and prevention services, and did not evaluate postvention support services (See Figure 1). At this stage, results were divided into papers which were evaluations of a specific postvention service, and papers which looked at the acceptability of methods of postvention.

Data Extraction

Data extraction from all studies were conducted by the primary author to a Microsoft excel database. Study types were classified as: outcome evaluation, process evaluation, economic evaluation, methodological evaluation, intervention development, protocols, descriptive, qualitative studies, and systematic or literature reviews. The research team conducted a data extraction quality assurance check and 2/3 of the research team blindly rated 10% of evaluation papers and 10% of acceptability papers.

The data which was extracted from each study is highlighted below:

1. Study characteristics: Author, publication year, location of study, study design, age range of participants, gender of participants, time since bereavement and relationship to deceased

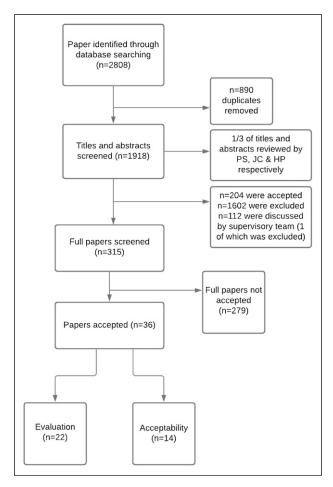


Figure 1. Flow diagram depicting the flow of information through the different phases of a systematic review.

- 2. Intervention characteristics: Type of intervention, setting, characteristics of intervention, duration/frequency of contact
- 3. Study outcomes: Outcome measurement approach used (e.g., qualitative and/or quantitative), baseline mean (SD) for intervention group and any comparison group if used (e.g., control), endpoint mean (SD) for intervention group and comparison group if applicable (e.g., control group) and intervention effect as reported within the paper. Outcome measures and timepoints.
- 4. Secondary study outcomes/process outcomes: acceptability, feasibility and satisfaction

Strategy for Data Synthesis

Data was collected and analysed according to type of study design and outcomes. A narrative synthesis was conducted which included 'evidence statements' as this summarised the results of the studies taking into account the key issues relevant to the review questions.

Risk of Bias Quality Assessment

Methodological quality was evaluated by the primary researcher using guidelines stipulated in the Mixed Methods Appraisal Tool (MMAT) (Hong et al., 2018). Two members of the research team then blindly assessed 10% of the papers in each group. Discrepancies from independent screening, data extraction, and quality assessment were resolved through discussion and where appropriate by a third reviewer within the research team.

Results

Thirty-six studies were included. These studies were then divided into (1) research evaluating specific postvention services (n = 22) and (2) research evaluating the acceptability of models of postvention (n = 14). From this point onwards, we will discuss the results of each of these categories separately.

Studies Evaluating Specific Postvention Services

Twenty-two studies met the inclusion criteria (see Figure 1). Table one details study characteristics. Included studies involved services from UK (n = 2), USA (n = 6), Australia (n = 6), New Zealand (n = 1), Canada (n = 3), Italy (n = 1), Ireland (n = 1), the Netherlands (n = 1), and Korea (n = 1). Where participant demographics such as ages and genders were discussed, this was included in the table. Nine of the studies used mixed methods. One study was a secondary analysis. Three studies were qualitative. A further nine studies were quantitative. The most common type of postvention intervention was community-based services (n = 13), one of these was a cost-effective analysis of a community-based evaluation. Two of the community-based interventions were an art community-based service and a further one was a writing and performative community-based intervention. Other types of interventions included group interventions (n = 6), internet resource (n = 1), school-based intervention (n = 1), and an internet-based forum (n = 1). The most common service to be evaluated was the Standby service in Australia, with four studies evaluating this service, one of which being the cost-effective study. Standby is a community-based postvention service that is funded by the Australian government and offers twenty-four-hour, 7 days a week support to anyone bereaved or affected by suicide. The Local Outreach to Suicide Survivors (LOSS) service in the USA featured in two of the studies. A LOSS Team is an active model of community-based postvention. The team is made up of suicide survivors who have been trained to assist the bereaved at the scene of a suicide by providing support and referrals (Table 1).

Studies Evaluating the Acceptability of Models of Postvention. 14 studies met the inclusion criteria (see Figure 1). Table 2 details study characteristics. Included studies originated from Canada (N = 1), Sweden (N = 2), USA (N = 5), Australia (N = 1), Ireland (N = 1), Norway (N = 1), the UK (N = 1), New Zealand (N = 1), and Finland (N = 1). Three of these studies were mixed methods, 8 were qualitative and 3 were quantitative. These studies did not evaluate a specific service but did assess the acceptability of a method of postvention. These methods include general support (N = 2), health services (N = 2), peer support (N = 1), teachers (N = 1), community providers (N = 3), internet support (N = 1) and Critical Incident Stress Debriefing (N = 1).

Quality Assessment

Evaluating Specific Postvention Services. The quality of all the 22 studies was assessed using the Mixed Methods Appraisal Tool (MMAT) (Hong et al., 2018), using the corresponding tool for the methodology of each study. Studies scoring 1 or 2 out of the 7 questions were rated as low quality. Studies scoring 3, 4 and 5 out of 7 questions were rated as medium quality. Finally, studies scoring 6 or 7 out of the 7 questions were rated as high quality (Hong et al., 2018).

Of the 22 studies evaluating a postvention service, four were rated as low quality (Aguirre & Terry, 2013; Bowden, 2011; Renaud, 1995; Rogers et al., 1982). This was due to studies not having explicit research questions and not clearly stating how the collected data addressed the research questions. The mixed methods study (Aguirre & Terry, 2013) did not adhere to the quality criteria for each tradition of the methods involved. Furthermore, it was difficult to assess whether there was an adequate rationale for using a mixed methods design and whether each component of the study was effectively integrated to answer the research question. The research questions were also unclear. The qualitative study (Bowden, 2011) was unclear in all questions relating to the qualitative methodology as it did not clearly state the evaluation aspect of the paper but was more of a descriptive paper on the service. The two quantitative papers rated as low (Rogers et al., 1982; Renaud, 1995) did not have a sample that was representative of the target population and had high nonresponse rates. There were five studies that were rated as medium quality. Two were mixed methods (Veale, 2014; Strouse et al., 2021) and they had issues in reporting on the risk of nonresponse bias, addressing the rationale for using a mixed methods approach and integrating the different components of the study effectively. Furthermore, inconsistencies between the quantitative and qualitative results were not discussed and the quality criteria for the qualitative methods was not wholly adhered to. One qualitative study was rated as medium quality (Mitchell et al., 2003) due to not clearly stating the research questions and whether the data collected would address the research questions. There was a lack of clarity as to whether the qualitative approach chosen and data collection methods were appropriate to answer

| Study ID & location | Study design | Type of intervention | Participant information | Outcomes measured | Summary of results |
|---|---|--|--|---|--|
| Ali and Lucock (2020), UK | Qual - interviews | Group Intervention - SOBS | N = 22, 16 were females and six were males. | The impact of SOBS groups, questions based on life before the suicide, the suicide, and life after suicide. | Make sense of the suicide through meeting likeminded people. SOBS helped participants gain a greater understanding of their own experience through the process of sharing and hearing other's stories. Put experience into perspective. Helped to find resolution that they |
| Gehrmann et al. (2020). Australia | Quant – A retrospective cross- sectional study | Community-based intervention - StandBy | N = 545, 84% female. 121 intervention group participants, and 424 control group participants | Compare outcomes between people bereaved by suicide who had accessed Standby (intervention group) and those who did not access Standby (cornerol group). Suicidality (SBQ-R), grief reactions (GEQ) and social isolation (DLS) measured. | could not nave prevented une datu. Participants in recent loss <12 months significant group differences on four of the outcome variables, with the intervention group scoring significantly lower on the SBQ-R, the grief reaction of loss of social connections, and social loneliness, but significantly higher on the grief reaction of responsibility compared with the control group. No significant difference between participants with: loss >12 months; risk of suicidality; outcome variables based on |
| Maple et al. (2019), Australia | Mixed Methods – Descriptive quant data & interviews | Community-based intervention - Standby | Quant N = 2748 service users. Qual N = 6 Standby female staff | The impact of Standby on service users and individuals providing the support measured through service usage data routinely collected by Standby, and semi-structured interviews. | The numbers of people accessing Standby demonstrates the continuing and increasing need for suicide postvention support, as prevention. Standby coordinators evidenced that working with people breaved by suicide impacted the workers but negative feelings did not last long. The importance of consistent and appropriate support and external supervision for workers sumo be underestimated. Workers were passionate about supporting people through suicide breavenent. Appropriate organisational mechanisms that allow for time away from work and the ability to |
| Peters et al. (2015), Australia | Mixed Methods – surveys and interviews | Community-based art | Quant $n = 32$ bereaved individuals. Qual $n = 30$ bereaved individuals interviewed. | Satisfaction with the project and themes reflecting the experience | Scores indicated that the Quilt was helpful in assisting participants in their bereavement. Interview data highlighted 4 themes: healing, creating opportunities for dialogue, reclaiming the real person and raising public awareness. |

Table 1. Characteristics of Studies Evaluating Specific Postvention Services.

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| Study ID & Study location design | Study design | Type of intervention | Participant information | Outcomes measured | Summary of results |
|--|---|---|--|---|---|
| Kramer et al. (2015) The Netherlands | Mixed Methods - pre and post study & interviews | Two web-based forums | N = 270 forum users. 87% female. Mean age of 42.9 years. | Baseline, 6-month and 12-month follow-up questionnaire for depression, well-being and grief. Frequency of use, and expectations and benefits from using the forum were also assessed. | At 12 months, there were small to medium- sized significant improvements in well-being and depressive symptoms (p < .001) and mathy as much for grief (p = .003). About two thirds reported benefit from visiting the forum. There |
| Veale (2014). Ireland | Mixed Methods- Longtudinal & interviews | Group intervention | N = 5, children aged 8-12 years. N = 3 children took part in follow up focus groups 4 years post-intervention | Child behaviour checklist, social relationships, functioning and interviews. | was no signiturant citange in tex or succe. Meaning making: participation in the group helped them to remember and to construct a narrative of the suicide. Follow up focus group showed how children: took leadership roles in their schools on suicide, suicide bereavement and prevention: contacted a national leader on youth mental health; raised funds and set up a school-based programme running a drop-in in the school for young people affected by suicide or to gain support if they are having problems; took an active role in suicide awareness and prevention in school. The group intervention had a multiplier effect as these dolescents reached out to their peers and mobilised adults to engage with them on suicide-related interventions. This was an unanticipated |
| Aguirre and Terry (2013). USA | Mixed Methods | Community-based intervention - LOSS 0 | Quant N = 68 bereaved familial and social network. Qual N = 8 survivors, 2 team members and 1 counsellor from a referring police department. | The impact of the LOSS Team services delivered in TC was measured in two ways: (1) time elapsed between death and access of services measured quantitatively through case notes of those receiving a LOSS Team contact; and (2) an examination of the role of the LOSS Team in the grief processinvestigated through phenomenological interviews | outcome. All former participants said they found the intervention very positive and timely. The LOSS team serves an important role in helping survivors connect to life-suving resources, encouraging belongingness. The LOSS Team helped participants connect with therapy, grief support services and with other survivors. Findings included that time elapsed between the suicide and accessing services did decrease from an estimate of 4.5 years without an Active Postvention Model like the LOSS Team to an average of 34 days. Significant impact of the LOSS Team on survivors' grief processes. |

| Study ID & location | Study design | Type of intervention | Participant information | Outcomes measured | Summary of results |
|---------------------------------------|---|--|--|---|---|
| Visser et al. (2014), Australia | Quant – A retrospective cross- sectional study | Community-based intervention - Stand- by - I | Intervention N = 90. Control N = 360. Intervention participants were matched with controls in a ratio of 4:1 to maximize the power of the study to detect differences between groups. | Health outcome variables K6, SBQ-R, EQ-5D and ICECAP | Standby clients scored higher than the control group on all four measures. Only one difference reached statistical significance – level of suicidality (b = 0.006). Standby clients and control group participants at high risk for suicidality (SRQ-R score above 7; 48% and 64% respectively) showing that Standby clients were significantly less likely to be at high risk (p = 0.005). Participants of both groups had high rates of absenteelsm. Those not employed were more impacted than those employed with participants from both groups reporting they were unable to perform their usual activities for around 6 of the previous 28 days. Both groups averaged approximately one G visit in the past averaged approximately one G visit in the past |
| Ryan et al. (2013), Australia | Mixed Methods – questionnaire including open ended questions | Performative community-based intervention | N = 20 writing workshops. N = 15 completed both writing and performance components. | Quantizative measure – the Kessler psychological distress scale which measures well-being, and a number of open-ended questions designed to elicit qualitative responses. | Mean scores on the Kasler psychological distress scale improved overall i.e., there was a significant decrease from 21.36 to 16.36 , ($p = 0.05$). Participants' feedback via responses to open-ended questions in the three evaluation questionnaires and in the interviews was highly motive. |
| Hawton et al. (2012), UK | Mixed Methods | Online resource | N = 12 completed questionnaires were returned. | Descriptive of individuals accessing the resource, rating the resource and general feedback. | Large numbers of co obtained by a ran, fewer directly by resource was exten resource was exten resource was exten and content. experiencing be experiencing be matters relating matters relating |

| Table I. (continued) | continued) | | | | |
|---------------------------------------|--|---|--|---|--|
| Study ID & location | Study design | Type of intervention | Participant information | Outcomes measured | Summary of results |
| Barlow et al. (2010), Canada | Mixed Methods – interviews and surveys | Community-based peer intervention | N = 16 (13 women, 3 men), 7 clients and 9 peer supporters. 16 completed one or both of the checklists: 13 completed the pre- and post-measurement. | Hogan's Grief Response checklist and the qualitative data. Initial assessment interviews and post-meeting surveys. | Both the supporters and clients reported benefits from this intervention. Strengths of intervention included being matched with a per supporter with experiment, the peer supporters generally had higher functional scores in all six behavioral aspects than their counterpart clients. After the intervention, the matching and in the ord of six means were statistically significant ($p < 0.05$): |
| Comans et al. (2013), Australia | Quant- cross- sectional | Cost-effectiveness of a community-based intervention - Standby | Control group N = 670, Intervention N = 90. Match ratio of 4:1. | A Markov model was constructed to estimate the health outcomes, quality-adjusted life years, and associated costs such as medical costs and time off work. | despair, detachment, and disorganization. The Standby service dominated usual care with a cost saving from providing the Standby service of AUS \$803 and an increase in quality-adjusted life years of 0.0.2. Probabilistic sensitivity analysis indicates there is an 81 % chance the service would be cost-effective given a range of possible |
| Cha et al. (2018), Korea | Quant- cohort study | School-based intervention | N = 956 (506 girls, 450 boys). Participants divided into two groups according to scores on the Child Report of Post-Traumatic Symptoms scores at baseline assessments. Students with a score of 19 or higher were classified as 'trauma group'. Scores of less than 19 were classified as 'non-trauma group'. | Post-traumatic symptoms, PTSD diagnostic criteria, Beck Anxiety Inventory, Beck Depression Inventory, symptoms associated with loss | At baseline and 5 months follow-ups, 8.6% and 2.9% of the students showed post-traumatic stress symptoms. At 5 months follow-up, there was a statistically significant decline in the post- traumatic stress symptoms, anxiety, depression, and complicated grief among the 'trauma group' ($\rho = 0.00$). A higher proportion of the female students showed post-traumatic stress symptoms after the incident of peer suicide than |
| Scocco et al. (2019), Italy | Quant – Longitudinal prospective study | Community-based weekend retreats | N = 61, 14 of whom took part in 2 or more retreat weekends (multiple participation). 80% women. Mean age of 49.5 years. | Sociodemographic data, The Five-Facet Mindfulmess Questionmaire, The Self-compassion Scale, The Profile of Mood States (POMS) | the male students. A significant reduction in all dimensions of the POMS (except Vigor-Activity) and lower levels of overidentification were observed after the retreat. |
| | | | | | (continued) |

| Study ID & location | Study design | Type of intervention | Participant information | Outcomes measured | Summary of results |
|--------------------------------------|----------------------------|--|--|---|---|
| Bowden (2011). New Zealand | Mixed Methods | Community-based intervention - WAVES | Nor included | End of programme questionnaire and focus interviews on service user satisfaction. | Value given to the structured programme, the expertise of the facilitators in creating a safe and supportive environment, and the opportunity to connect with and gain support from a community of fellow grievers. Some changes were initiated by the facilitators following reflection on process evaluation, delivery and method and an environ research |
| Cerel and Campbell (2008), USA | Secondary data analysis | Community-based intervention - LOSS | Differences in those who received an Active Model of Postvention (APM) (N = 150) and those who received a traditional passive postvention model (PP) (N = 206) | Current and lifetime symptoms, history of psychological and prior mental health treatments. Suicide attempts, Information on the deceased. | APM presented for an intake sooner than PP. APM were more likely than PP to attend any support group meetings and attended more groups than PP. APM were non more likely than those who did nor have received mental health treatment before the death, to report current suicidal ideation at the time of their intake or to have a history of suicidal ideation or attempt have a history of suicidal ideation or attempt |
| Mitchell et al. (2003), USA | Qual | Group intervention | N = 7 individuals bereaved by suicide attended a group for all or 6/8 sessions. | Both agentic and victimic narratives are identified in accounts of loss each member shares within the suicide bereavement group. | Participants in the suicide survivor support group frequently reported heightened well- being and a personal sense of community through sharing their narratives of loss with each other. Observations of how participants responded to and modified narratives in the group intervention suggest that Polkinghorne's from of the context of the polkinghorne's |
| Pfeffer et al. (2002), USA | Quant | Group intervention | 52 families (75 children) were eligible and assigned in alternating order to receive (27 families, 39 children) or not to receive (25 families, 36 children) the intervention. | Changes in anxiety and depressive symptoms, using the Beck Depression Inventory, the childhood Posttraumatic Stress Reaction Index, The Children's Depression, Inventory, The Revised Children's Manifest Anxiety Scale and the Social Adjustment Inventory for Children & Adolescents. | (175) paradom has value as a therapeutor tool. Nonintervention children had poorer social adjustment than children asigned to the intervention ($p < .005$). Significantly higher dropout rates in nonintervention children (<.0001). Greater reduction in anxiety ($p < .01$) and depression ($p < .0006$) for children in intervention group than non-intervention children. |

| Table I. (continued) | ntinued) | | | | |
|-------------------------------------|-----------------|---|---|--|--|
| Study ID & location | Study design | Type of intervention | Participant information | Outcomes measured | Summary of results |
| Constantino et al. (2001), USA | Quant | Group intervention | N = 60 widows randomly assigned to Bereaved Group Intervention (BGP) or Social Group Postvention (SGP). | Changes in depression, psychological distress, grief and social adjustment. | Statistically significant changes were found on all measures when the SGP and the BGP were combined for analyses on posttreatment assessments 3 to 5 days after completion of the group intervention, and 6 months and 12 months after the intervention (p < .0001). Participants experienced a significant reduction in 6 of the 9 subscales, depression, psychological distress, and grief, as well as an increase in social adustment (p < .0001). |
| Strouse et al. (2021), USA | Mixed Methods | Art intervention | N = 39 adults | Quart – social validation, developing new possibilities, relating to others. Qual-theres of between the processing, sharing, collaboration, relaxation and positive collaboration, relaxation and positive contributions of the art experience. | Social sharing of meaning-making was particularly impactful, as evidenced by the significant improvements in social validation and imalidation scores. There was a decrease in feelings of interpersonal invalidation. There was a significant increase in new possibilities; two appets of postraumatic growth; relating to others; feelings of validation. No significant others; feelings of validation. No significant exults for total PTGI scores; personal strength; spirtual change. Qualitative themes provided insight into the significance of validation, bereavement processing and sharing and collaboration. Sharing with the studio facillaboration. Sharing with the studio |
| Rogers et al. (1982), Canada | Quant | Community-based intervention and group intervention | N = 53 adults; 47 were female. The median age of 40.3 years. N = 33 responded to the follow up survey | Rating a list of 8 program goals. Rating social support. | An interface of extended that the program helped by putting the suicide in perspective, so it does not drain energy and endotors; providing a safe space to express feelings without being judged and talking about the suicide. 2 our of 33 follow up survey respondents reported being uncomfortable with the format of the meeting with 2 volunteers. |
| Renaud (1995), Quebec, Canada | Quant | Group intervention | N = 8 | Anxiety, depression. Ability to meet own goals and objectives. | Significant dec Individuals we |

| Study ID & location | Study design | Type of intervention | Participant information | Outcomes measured | Summary of results |
|---|-----------------|--|--|---|--|
| Ligier et al. (2020), Montreal, Canada | Methods | Medical/pharmacological, information, support and ourreach | N = 29. Mean age of participants 57.7 years, 23 were women. | Emotional experiences post suicide death northfation and how long they lasted. General physical health, mental health and poblems/diffultes post suiced. Personal or family history of suicide. Semi-structured interview guide from the five items of the Brief Grief Questionmaire. Usefulness of resources. Depression and anxiev (Patient Health Questionnaire, PHQ-9 and GAD-7.) | Interviews revealed that those who did not receive professional help post suicide felt they might have benefitted from such help, they would have liked to receive a call from a professional within 66 days after the suicide. At the time of the death norification, participants felt shocked by the death, sad/ discourged, and angy. At the time of the fing surveyed, participants felt at peace, sadfanxious, and loss. Recommendations included: support from physicians and/or nurse practitioners, first responders should be responsible for signosting support resources; access to support groups and other services, outreach needs for resources and practical support within the first 6 months; a need for subport within the first 6 months; a need for subport within the first |
| Pettersen et al. (20 I5), Sweden | Qual | Health services | N = 18 suicide-bereaved siblings (13 women). At the time of the interview, two participants were between 15-20 years old, are nere between 31- 21-30 years old, and nine were between 31- 38 years old. | Indepth interviews, narrative of important events and experiences related to the sibling's suicide. Two questions asked at the end of the interview surrounding experience of health services support after the suicide. | Participants reported needing professional support after their loss, and most sought help. The professional support included a non-eum appointment with a physician in an emergency unit to consecutive sessions with a psychologist, psychiatrist, school nurse, or courselor. Reasons for seeking help from health services included: to cope with grief responses; facilitate social relationships; and search for reasons leading to the suicide. Reasons for not seeking help included ack of trust in health services, inability due to overwheiming grief responses, and no need for help. Recommendations included: immediate and repeated contex, empative and personal meetings, and |
| Barrone et al. (2018), USA | Qual | Peer support | N = 10 individuals with experience in managing peer support programs for bereaved in military, law enforcement, and ennergency responder communities. 6 women and 4 men. Age ranged from 41 to 75 ($M = 56.9$, SD = 10.6). | Experts were asked to present their views on what makes for a successful program providing peer support for bereaved survivors. | Findings indicated that effective peer support programs for the bereaved should be easily accessible; conflectinai; provide a safe environment; use peer supporters with similar shared experiences to clients; select peer supporters carefully; partner with professional mental health providers; train peer supporters thoroughly; and provide care and monitoring for peer supporters. |

Table 2. Characteristics of Studies Evaluating Acceptability.

| Table 2. (continued) | ntinued | • | | | |
|------------------------------------|-----------------|----------------------------|--|--|---|
| Study ID & location | Study design | Type of intervention | Participant information | Outcomes measured | Summary of results |
| Feigelman et al. (2020), USA | Quant | Primary care physicians | N = 146 bereaved respondents reporting suicides as causing them severe emotional distress. Mean age of 52 years. 83% female. | Grief experience questionnaire, mental health functioning, perceptions of responses from physicians. | 48% of the respondents encountered positive, help- offering responses from physicians, compared to 10% whose responses were deemed as negative. Experiences included: doctor expressed a negative opinion about loved one or the way they died, said things tax were hurtling or dismissive. Offered medication to help, suggested a referral to mental health resources, suggested a referral to mental health resources, suggested a referral co offering such as a support group doctor told patient about a similar loss they had experienced. Physicians positive and help rendering responses greatly outrunbered negative and dismissive |
| Farragh (2018), USA | Qual | Teachers | N = 6 retired teachers. | Interview questions surrounding teachers' preparedness to support students affected by the death of a classmate, policies and porcedures within the school, how the policies are implemented and how does a school counsellor influence teacher support and impact the response to students who return to school after a death by suicide. | Teachers reported: feeling unprepared to support students who returned after a death by suicide: that the school counselor is critical/sestnation to supporting them in the classroom with critis response, that the school counselor is critical/sestnation to supporting them in the classroom with critis response, addeth by suicide. Entergent themes indicated teachers were: unaware of policies related to supporting students ther a death by suicide, unware of policies that directly influenced the crisis response of a death by suicide, aware that a school crisis committee existed, but it was questionable about who or how the school crisis plan, if existent was implemented; supporting students after a death by suicide, who or withour policy. Although a culture of caring existed, there were inconsistencies in how individual teachers responded to students after by suicide and that a formal plan did not exist. |
| | | | | | (continued) |

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| Study ID & location | Study design | Type of intervention | Participant information | Outcomes measured | Summary of results |
|--|------------------|---|---|---|--|
| Goodwin-Smith et al. (2013), Australia | Qual | Community support aimed at Aboriginal suicide | Throughout 2011, focus groups were held with Aboriginal service providers and health workers in four regions of metropolitan Adelade (North, central West and South, with six, six, five and 10 participants respectively). Fifteen individual semi- structured impreviews were also held with Aboriginal people who have been personally bereaved by suicide. | Questions surrounding the support the community needs, the experience of suicide within the family, what appets of the service would appeal to shorignal people, how services could be improved, what support is already in place and what other kinds of support would be helpful. Cultural considerations and barriers to accessing services are asked about. | A valuable suicide postvention service that would be significantly enhanced if postvention work was a harnesset to sare. Aborginal people and communities who suffer afgroportionately from suicide bereavenent. Themes indicated: the usefulness that the service and fifte bereaved Aborginal people and lessons learnt from Aborginal input, these eleivery. In partnership and through a service delivery model which involves Aborginal input, these assets are graphle of constructively mitigating Aborginal grief. This potential enhancement of postrution as a social service denomerstrates the utility of a enniting numers of Validine rotentine". |
| Trimble et al. (2012), Ireland | Qual | General postvention support (social support, support groups). | Ten participans, five male and five female bereaved by the suicide of a close family member. | Questions guided participants to report on experiences accessing social, community and professional support networks | Themes notwork to be performed on the performance of the performance o |
| Dyregrov (2002), Norway | Mixed Methods | Community-based local authority | A questionnaire developed for this study maps the extent of professional community support as a proceed by parent survivors (N = 12B). Additionally, 41 survivors described the quality of the assistance through in-depth interviews. | Extent of professional community support and quality of assistance. Another questionnaire assessed the provisions and the organisation of intervention strategies in the local communities. | 85% of the par experienced cc The communiti the psychiatric nelpe undertaker to b is reported t counseling was groups. Local groups. Local |

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| Table 2. (continued) | ntinued | | | | |
|---|------------------|-------------------------|--|--|--|
| Study ID & location | Study design | Type of intervention | Participant information | Outcomes measured | Summary of results |
| Tiatia-Seath et al. (2019), New Zealand | Mixed Methods | Community-based | Pacific communities and service providers. Online survey component <i>n</i> = 70 Pacific service providers included professionals, social workers, nurses, spiritual leaders. | Survey used a structured questionnaire consisting of close-ended (quantitative) and open-ended (qualitative) items. | Service providers were no more aware of postvention resources available than community respondents. Provide respondents were unaware of group discussions (or fono) as a resource. Over a quarter of provider respondents were disatified with resources available, while almost a quarter fit the materials had limited or no effectiveness. These fit the materials had limited or no effectiveness. These fit the materials had that suicke postvertion support could be improved by training service provider to be more informed of resources and particularly of fron a culturally appropriate resource. Provider respondents reported that health professionals, churches, and community leaders were best placed to lead suicide postvention individues. |
| Chapple and Ziebland (2011), UK | Qual | Internet support | N = 40 narrative interviews. 28 women. | Narrative interviews with a semi-structured interview guide which was used to explore relevant issues that did not emerge in the first part of the interview. This included where they found help and support. | A few people preferred not to use the Internet for this purpose or had no access to a computer. Few adverse consequences of Internet communities were mentioned. In conclusion they found evidence that the Internet transformed the experience of bereavement by suided, not dramaticily through providing access to other people's experiences. |
| Feigelman et al. (2008), USA | Quant | Internet support groups | Taken among parents who sustained the loss of a child to suicide this study explores the participation of parents in hiterane support groups, comparing their demographic and loss-related characteristics (N = 104) to other parent survivors participating in face-to-face support groups (N = 297). | The Grief experience questionnaire, the family/social strain scale, the family unhelpful response scale, the social unhelpful response scale. | Similar levels of Internet use were reported in under- served rural results, urban, suburban, small city and rural residents for both Internet and face-orface subsamples. Several factors contributed to interest in Internet grief support including 24/7 availability and opportunities to invest more time into this type of support group experience. Compared to their face-to- face group counterparts, Internet users experienced greater sucide stigmatisation from their families and other associates. Unable to find comfort and support from their personal communities, Internet users -and especially highly depressed survivorssought and obtained valuable help from the Internet users -and especially highly depression, while a others their feelings of depression, while a others their feelings of depression, while a others commented that they perceived this group as their lifewave, helping them to stary alwe after having come to their lowest point of depression and despair. |

| | I | | | | |
|------------------------------------|-----------------|--|---|---|--|
| Study ID & location | Study design | Type of intervention | Participant information | Outcomes measured | Summary of results |
| Piețiă (2002). Finland | Qual | Group interventions | N = 16 interviews with bereaved parents and (adult) children, half of whom had attended a bereavement support group after their family member's suicide. | Ethnomethodological study of 16 qualitative interviews with parents and (adult) children concerning their experience of a (respective) family member's suicide. | Half were in bereavement support groups, acting as storytellers and recipients of other family member's suicide and bereavement. Interviewees appreciated talking in support groups, sharing with peers thad valident their own experience. They described how group members had formed a 'astery prest had valident their own experience. They described how group members had formed a 'astery prest and valident their own experience. They described how group members had formed a 'astery prest and the support groups, sharing with peers than 'anonymous' group, the experience, or to protect them as they had done with their families. In an 'anonymous' group, the interviewees had found it easier to be just one of the interviewees had found it easier to be just one of the many, particularly in contrast with their family in which attendant tealings. Only in support groups was it possible for them to call about their suicide bereavement as individuals, without taking into account the emotions and experiences of their |
| Juhnke and Shoffner (1999), USA | Qual | Adapted Critical Incident Stress Debriefing | N = II families and older siblings. No further Information is given. | General comments and anecdotal evidence. No further Information is given. | Anecdotal evident manae ercters and older sibling survivors suggested that the process has been helpful. The Family Dehreing Model provided a forum where they could discust the suicde and its effects on the family. Prior to the Dehreing Model experience, many family members would isolate themselves and grive individually withour openly discussing their feelings of guilt, arger, and fear of future family suicides, which appeared to have inhibited familal interpresonal support and communications. The Family Debriefing Model encouraged members to mutually discuss these feelings and perceptions, suggesting that following the Family Debriefing Model, family members experient reduce feelings of arget, familal suicide, and and fear of familal suicide. |

| (continued) | |
|-------------|--|
| Table 2. | |

| | I-health was icipants and memorial memorial eventy of he suicide. Anthe e opposite e opposite conine gesting that on and cause |
|-------------------------|--|
| Summary of results | The results showed that psychosocial ill-health was severe among the suicide bereaved participants and that a majority used digital resources. The propensity to engage in online support groups or memorial websites was not predicted by the severity of psychosocial consequences following the suicide. However, mutiple regressions showed that higher online support group activity predicted more satisfaction with current psychosocial health, while menorial websites seemed to have the opposite effect. Some digital resources, for example, online grief related to suicide loss, but also suggesting that memorial websites my necase runination and cause |
| Outcomes measured | 21 questions with fixed response alternatives and one The results showed that psychosocial ill-health was open-ended question. Demographic information severe among the suicide bereaved participants and perever psychosocial consequences that following the that a majority used digital resources. The propensity loss, satisfaction with current psychosocial health, to engage in online support groups or memorial evaluation of the different resources that were used, websites was not predicted by the severity of psychosocial consequences following the suicide. However, multiple regressions showed that higher online support group activity predicted more satisfaction with current psychosocial leadily, the severity of psychosocial resources following the suicide. However, multiple regressions showed that higher predicted more satisfaction with current psychosocial health, while memorial websites stands action with grief related to suicide loss. Unclass that memorial websites my increase turination and cause memorial websites. |
| Participant information | Internet based individual N = 327 suicide bereaved responded to the support |
| Type of intervention | Internet based individual support |
| Study design | |
| Study ID & location | Westerlund (2020), Quant Sweden |

the research question. One quantitative study was rated as medium quality (Gehrmann et al., 2020) due to incomplete outcome data, low response rate and the intervention group (n = 121) being significantly smaller than the control group (424). Finally, there were 14 studies assessing a postvention service that were rated as high quality; Six were mixed methods (Maple et al., 2019; Peters et al., 2015; Kramer et al., 2015; Ryan et al., 2013); Hawton et al., 2012; Barlow et al., 2012). They were rated because they had adhered to the quality criteria of both the qualitative and quantitative methods and integrated these aspects to address the research questions. There was also explicit and adequate rationale for using a mixed methods approach. Seven studies rated as high were quantitative (Cerel & Campbell, 2008; Scocco et al., 2019; Cha et al., 2018; Visser et al., 2014; Comans et al., 2013; Pfeffer et al., 2002; Constantino et al., 2001). One study rated as high was qualitative which evaluated the SOBS group intervention (Ali & Lucock, 2020). These studies met six or all the methodological quality criteria. The studies that met six of the criteria had some issues with confounding variables (n = 2;Scocco et al., 2019; Comans et al., 2013) and the sample was not representative of the target population (n = 1; Constantino et al., 2001).

Of the 14 studies included in the acceptability section of this review, one study was rated as low quality, two studies were rated as medium quality and 11 were rated as high quality. The study rated as low quality (Juhnke & Shoffner, 1999) had insufficient empirical data, relying on general comments and anecdotal evidence for the efficacy of a debriefing model for postvention support. It did not outline clear research questions, data collection methods or analysis. Therefore, further research is needed to assess the acceptability of a debriefing model as postvention support. Both of the general postvention models were rated as high quality (Ligier et al., 2020; Trimble et al., 2012). Similarly, both of the health models of postvention support were also rated as high quality (Pettersen et al., 2015; Feigelman et al., 2020). Of the studies assessing the acceptability of web-based models of postvention support (n = 3), one was rated as medium quality due to its inability to assess the risk of non-response bias and the sample not being representative (Feigelman et al., 2008). The remaining two studies assessing web-based models were rated as high quality (Chapple & Ziebland, 2011; Westerlund, 2020). One study assessed a postvention model which was led by teachers was also rated as high quality (Farragh, 2018). A study evaluating a peer-led postvention model was rated as high quality (Bartone et al., 2018), as was the group postvention model (Pietilä, 2002). Of the three studies evaluating community-based models of postvention, two were rated as high quality (Goodwin-Smith et al., 2013; Tiatia-Seath et al., 2019). The third study was rated as medium quality (Dyregrov, 2002) (Tables 3 and 4).

Quality Assessments of Components of Effective Postvention Services. Where adequately reported in the studies, components of postvention services are discussed in this section. Group interventions such as Survivors of Bereavement by Suicide (SOBS) in the UK have been supporting people bereaved by suicide, offering peer-led support groups, a national telephone helpline, email support, online virtual support groups and

| Study IDAli and Lucock (2020)The sampling and recruitment strat who had lost a son. Recruitment v those bereavGehrmann et al. (2020)Use of a cross-sectional design, it w response rate among StandBy client may have resulted in a sample that the intervention group (StandBy client may have cortributed to imp Which may have contributed to imp The use of an maple et al. (2019)Maple et al. (2019)The variability of the data was a signand support session', was not re and support session', was mont re recorded for Peters et al. (2015)Peters et al. (2015)Sampling bias as it was mainly wom who participants were mostly foromplicated grief. Suicidal risk was whether a causal relation.Veale (2014)Only 3 children took part in the fol at follow up reported it would have | | |
|--|--|---------------|
| 20) | Main threase to validity | MMAT Score |
| 20) 20) | I TAILL UT EALS UD YAILULY | 2001 |
| 5) | The sampling and recruitment strategy. The majority of participants were white British females or parents 6 who had lost a son. Recruitment was for individuals who attend peer support groups which excludes those bereaved by suicide who do not access this support. | 6 - Medium |
| 6 | Use of a cross-sectional design, it was not possible to determine changes in outcomes over time. The low 4 - Medium response rate among StandBy clients, the use of convenience sampling, and selection bias towards females may have resulted in a sample that might not be representative of all people bereaved by suicide. Likewise, the intervention group (StandBy clients) willingly accessed StandBy after their loss. It is possible that individuals who seek support may have contributed to improved outcomes of StandBy clients coping skills than individuals who do not access support, which may have contributed to improved outcomes of StandBy clients compared with the control group. The use of an online survey may have led to self-selection bias | 4 - Medium |
| (6) | The variability of the data was a significant limitation of the study, in some areas there were high levels of missing data. For example, some of the fields with high levels of missing data include 'time between suicide and support session', was not recorded for 46% of clients, "Clients exposed to prior suicide" not recorded for 44%, "Location postcode" 23% not recorded. | 6 - High |
| . (2015) | Sampling bias as it was mainly women who participated. A further limitation to this study was that people who participate in Quilt projects are not necessarily representative of all suicide survivors. | 6 - High |
| | The 270 participants were mostly female, low in well-being, with high levels of depressive symptoms and complicated grief. Suicidal risk was high for 5.9%. Because of the pre-post design we cannot determine whether a causal relationship exists between the form and changes in mental health. | 6 - High |
| | Only 3 children took part in the follow up. Relatively small sample size for the study <i>n</i> = 5. The 3 children 4 - Medium at follow up reported it would have been nice to have a male facilitator as all facilitators were female. Lack of control group. | 4 - Medium |
| Aguirre and Terry First year evaluation, which doesn't (2013) | First year evaluation, which doesn't show long-term effects of the service. Not a quant evaluation as it is an audit of beneficiaries' information. | 2 - Iow |

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| <u>(</u> | | MMAT |
|----------------------|--|----------|
| | Main threats to validity | score |
| Visser et al. (2014) | The observational design of this study means that bias may be present, and the direction of this bias is difficult to assess. Respondents were self-selected and there may have been systematic differences between those who chose to be included and those who did not. This means that the results may not be transferable to all people bereaved by suicide. The low response rate by StandBy clients (23%) may also have influenced the results. Despite matching the samples of the two groups on two variables (i.e., relationship to the deceased and time since bereavement), there were some significant demographic differences between the intervention and control groups and these differences may have influenced the results. However, based on the direction of these differences, it could be hypothesized that the control group would be expected to be faring better than the intervention group, which was not shown in the results. Use of other types of bereavement support was not measured in this study. As such, it is possible that the control group had accessed support from other bereavement support services, which may have affected their health and social outcomes. Finally, although the results of this study show a significant reduction in self-reported suicidal thoughts and behaviours by StandBy clients, it is extremely difficult to unequivocally prove that the intervention reduces actual suicide numbers or rates for people bereaved by suicide. The relatively low incidence of suicide as an event means that very large sample sizes are required to have sufficient statistical power to reveal a significant effect. In addition, because of the observational study design, it is difficult to remove the potential effects of confounding variables. | 7 - High |
| Ryan et al. (2013) | (1) there was a self-selection bias amongst the participants in that all of them had volunteered to participate in the project; (2) the number of participants was small with only 15 completing the entire project; and (3) there was no comparison intervention or control group. | 6 - High |
| Hawton et al. (2012) | Low number of questionnaire respondents and the small sample of participants of the focus group and interview study, all of whom came from the same geographical area. | 6 - High |
| Barlow et al. (2010) | The cohort presented as a small sample; several additional tests were conducted to determine if the results were sufficiently robust to warrant future research on peer support. | 6 - High |

| Study ID | Main threats to validity | MMAT Score |
|----------------------|---|---------------|
| Comans et al. (2013) | The cohort in this study was self-selected in both arms and, therefore, there may be systematic differences between this group of people and all those affected by suicide bereavement. It could be the case that those more affected by unresolved complicated grief were more likely to volunteer for this study. Differences were evident between the StandBy group and the control group. The control group. The control group. The deceased compared likely to have fewer close relatives and were more likely to have been friends with the deceased compared to the StandBy group. Control subjects also had on average, a longer period of bereavement. These differences are more likely to be even the standBy group. Control subjects also had on average, a longer period of bereavement. These differences are more likely to be even the control subjects also had on average, a longer period of bereavement. These differences are more likely to be acceased is a close family member, and that grief naturally resolves over time. Therefore, these differences are more been account to the standby contact and to have been the standby cover time. | 6 - High |
| Cha et al. (2018) | It was difficult to conduct a long-term follow-up study because the timing of the follow-up was determined according to the circumstances of the schools. Second, various psychosocial factors were not examined. Third, the level of intimacy between the student who committed suicide and the suicide survivors was not assessed. It may affect the post-traumatic stress symptoms and depressive symptoms. Finally, we could not assessed. | 7 - High |
| Scocco et al. (2019) | Selection bias since enrolment in the course was voluntary/self-initiated. The cohort is also small, and there is no control group or follow-up data. At present, only 14 participants attended more than one retreat. More data and patients are needed to establish the role of specific interventions versus non-specific factors in this type of setting. Another limitation is that no grief-specific scale was utilized to assess grief intensity and its qualities, or the presence of complicated grief. Our study focused primarily on mindfulness dimensions and mood states, but to evaluate the effectiveness of these retreats, it would clearly also be important to focus on grief and how it changes over time. More over, no specific scale was under a submersion of presence of complicated grief. Our study focused primarily on underly also be important to focus on grief and how it changes over time. More over, no specific scale was under and presence of complexes over the effectiveness of these retreats, it would be apprented by a be important to focus on grief and how it changes over time. More over, no specific scale was used and presence of complexes over the effectiveness of these retreats, it would be apprented by a solution of presence of complexes over the effectivenes of these retreats. | 6 - High |
| Bowden (2011) | used to evaluate and measure the presence of depression, and saturation rever was not assessed. Does not discuss participant numbers. Doesn't fully outline evaluation and results. Poor quality of reporting the evaluation. | I - Low |

| Study ID | Main threats to validity | MMAT Score |
|------------------------------|--|---------------|
| Cerel and Campbell (2008) | Sample not representative, overwhelming caucasian. Self-referred sample of individuals seeking help following a suicide. Does not evaluate users' opinion of the service and functioning. Does not utilise follow ups and long-term effects. | 7 - High |
| Mitchell et al. (2003) | The use of narrative theory and structural analysis resulted in the discourse of group members being 3 - Medium subjective. Only 1 group was assessed, making the results different to generalise to other groups. | 3 - Medium |
| Pfeffer et al. (2002) | Higher dropout rates in nonintervention children caused there to be 9 retained non-intervention children as compared to 32 retained children in the intervention group, leading to the intervention children being significantly younger. Small sample size. Codependence effects as there were multiple children from the same family. Children with diagnosed mental health problems were excluded. | 7 - High |
| Constantino et al. (2001) | No control group. Self-selection bias, small sample size. The effect of time can't be ruled out. | 6 - High |
| Strouse et al. (2021) | The posttraumatic growth measure is usually intended to measure change over longer periods of time 3 - Medium with treatment and was not designed for complex grief. It was a challenge to find measures for brief art therapy interventions and complex grief. One third of the participants completed the follow-up survey. While this is considered an acceptable response rate, there is a possibility that those participants felt more positively about the studio, and therefore chose to share their feedback. | 3 - Medium |
| Rogers et al. (1982) | Low turnout for group sessions. Not all participants completed the follow up questionnaire which calls into question the results, did those who returned the questionnaire have a better opinion of the intervention than those who did not. | 2 - Low |
| Renaud (1995) | Small sample size. Did not measure outcomes including functioning and grief. | 2 - Low |

Table 3. (continued)

| Study ID | Main threats to validity | MMAT Score |
|--------------------------------|--|---------------|
| Ligier et al. (2020) | Retrospective study prone to memory and reconstruction biases. Interviews were recorded but not transcribed. The study focused only on SBS mentioned in police reports; other family members, friends and colleagues were neither identified nor contacted. | 6 - High |
| Pettersen et al. (2015) | The participants were all under the age of 38 and the fact that the majority are female. Study was carried out in Sweden where healthcare is universal and tax funded, results may not reflect what is experienced in other healthcare systems which may narrow the transferability of our findings. The perceived quality of the professional help received may have been influenced by psychological phenomena like the projection of unwanted emotions (1.e., blame) onto others or identification with the deceased sibling's experiences as a way of copine with the loss | 7 - High |
| Bartone et al. (2018) | The sample of experts interviewed for this study is somewhat small ($N = 10$), and thus may not represent the entire field of experts providing peer support services to bereaved survivors. Results may not be a true reflection of the experience of being bereaved by suicide as they did not interview those bereaved by suicide. | 7 - High |
| Feigelman et al. (2020) | The study sample was predominately White, female, highly educated, and seeing an established physician after the loss. It is unclear how physician responses are perceived by men, people of color, and those who are not seeing an established physician after the loss. The sample also came primarily from a suicidology listserv and survivor of suicide loss support groups, which may indicate that respondents are already involved in prevention/postvention efforts and may be comfortable with help-seeking behaviours | 6 - High |
| Farragh (2018) | Selection bias, researcher choosing participants. Past teachers, not current teachers, may result in participants not being up to date with postvention plans and emerging data. | 6 - High |
| Goodwin-Smith et al. (2013) | Small sample size for both providers and individuals bereaved by suicide. | 6 - High |
| Trimble et al. (2012) | No real evaluation, small sample size, no comparison between groups. | 6 - High |

Table 4. Quality Assessment of Acceptability of Models of Postvention.

| Table 4. (continued) | | |
|-------------------------------|---|---------------|
| Study ID | Main threats to validity | MMAT Score |
| Dyregrov (2002) | The response rate was only 50% of the total population. However, the researcher's contact with 30% of 4 - Medium the non-participants (see Procedure) left the impression that the latter were even worse off, concerning psychosocial health and lack of help, then the participants. Hence, the need for assistance among those bereaved by youth suicide might be even greater, and the provisions even poorer, than data from this study reflect. | 4 - Medium |
| Tiatia-Seath et al. (2019) | spondents was purposively identified d thus may not represent the target s of postvention support. | 6 - High |
| Chapple and Ziebland (2011) | Limited recruitment as participants needed access to the internet. As a narrative interview study these data cannot inform us about effects on people's health status or use of services. | 7 - High |
| Feigelman et al. (2008) | cting the vhich may | 5 - Medum |
| Pietilä (2002) | Interviews with parents and (adult) children concerning their experience of a (respective) family member's suicide and therefore not generalisable to other experiences | 6 - High |
| Juhnke and Shoffner (1999) | Insufficient empirical data has been collected to suggest efficacy. Additional investigation is needed. 10 out of 11 families were caucasian. | 0 - Low |
| Westerlund (2020) | Cross sectional design, no follow up of the anonymised bereaved participants was possible. Risk for memory biased reporting by the participants. Self-selection bias as it was advertised on Facebook groups, websites relating to suicide organisation in Sweden, filtering out other suicide bereaved individuals that do not use these websites or use the internet. Women seem to use these websites more and therefore there is a gender bias. | 7 - High |

online community forum. Ali and Lucock (2020) evaluated SOBS support group members who reported experiencing difficulties adjusting to the suicide, which motivated them to meet others in a peer suicide bereavement group who had shared a similar experience. This helped them to normalise their grief experiences and share ways of coping with the death. Veale (2014) evaluated a group intervention for children and found that groupwork enhanced connectedness, emotional expression, family communication, memory and meaning making. Groupwork also enabled active coping. Furthermore, measures of emotional and behavioural problems and social competence showed improvements 6 months post-intervention. Mitchell et al. (2003) also evaluated a group intervention for children and found that participants reported heightened wellbeing and a sense of community through sharing their narratives. These findings suggest that group interventions should attempt to foster the development of agentic narratives, rather than victimic narratives as this empowers the bereaved to feel in control. Pfeffer et al. (2002) studied children's group intervention and reported that children who received the intervention had significantly lower scores for anxiety (p <.001) and depression (p < .006) than those who did not receive the intervention. Constantino et al. (2001) evaluated a group intervention for widows. When comparing a bereavement group postvention and a social group they found that when these interventions were combined, significant changes were found on all measures, seeing an improvement in 6 of the 9 grief subscales, depression (p < .0001), and psychological distress ($p \le .0001$). There was also a significant improvement in social adjustment. ($p \le .0001$) .0001). Another study looking at adults participating in a support group (Renaud, 1995) found that there was a significant decrease in depression (p < .001) and situational anxiety (p < .001). Rogers et al. (1982) evaluated a community and group-based intervention and found that participants reported that the intervention helped by putting the suicide into perspective as it provides a "safe space" to talk about the bereavement without feeling judged.

Four studies rated the Standby service in Australia which is a community postvention service. Gehrmann et al. (2020) found that participants with a bereavement in the last 12 months who received the intervention had significantly lower scores in suicidality, experience a loss of social support and social loneliness compared to those who did not receive the intervention. However, participants who received the intervention whose bereavement was more than 12 months showed no significant difference, suggesting that it is crucial for postvention support to be timely. Maple et al. (2019) found that postvention workers believe that appropriate and timely support reduces the negative effects associated with suicide bereavement. They also state the importance of maintaining their own well-being through external supervision. Visser et al. (2014) compared those who received the intervention with those who did not and found that Standby improves well-being across four measures. It also significantly reduced suicidality. Those that received the Standby intervention had significantly less healthcare usage than those in the control group, suggesting that Standby is effective in improving well-being and may also be cost-effective. Comans et al. (2013) found that Standby was far more cost-effective than usual care with a cost saving of \$803AUS and an increase in quality-adjusted life years of 0.02. Probabilistic sensitivity analysis indicated there was an 81% chance the service would be cost-effective. However, none of the other studies were evaluated in terms of cost-effectiveness, this is the only cost-effective evaluation included in this review.

The LOSS service based in the US, a community intervention was evaluated by Aguirre and Terry (2013), and they found that the service helped them to feel supported and create a community around themselves, by connecting them with resources and other bereaved people. Furthermore, Cerel and Campbell (2008) found that those receiving the support were more likely to access additional support such as support groups. Bowden (2011) evaluated the Waves service, a community-based intervention in New Zealand and reported that participants find the features of the intervention "highly valued", however this study was rated as low in quality as it did not outline any participant information, methodology or results.

Barlow et al. (2010) evaluated a Canadian peer support intervention and found that peer supporters can be effective in supporting people recently bereaved. This study also assessed the functioning of the peer supporters as well as the clients. Peer supporters had higher levels of premeasurement functioning compared with the clients, suggesting that peer support can be delivered effectively by trained individuals who have grieved sufficiently in order to support others. Scocco et al. (2019) found that weekend retreats reduced all dimensions in the Profile of Mood states, suggesting that these can be beneficial to individuals bereaved by suicide. School-based interventions may also support younger people bereaved by suicide. Cha et al. (2018) found that at 5 months follow-up there was a significant decrease in post-traumatic stress symptoms, anxiety, depression and complicated grief in the 'trauma' group.

Art and performative postvention support were also represented in this review. Peters et al. (2015) found that the quilt project was helpful in assisting participants in their bereavement by giving them an opportunity to reflect and grieve without fear of negative social reactions. Participants rated themselves as having high satisfaction with the project. Ryan et al. (2013) found that a writing and performative postvention improved psychological distress. Participants gave highly positive feedback in interviews. Strouse et al. (2021) found that art can enable meaning-making as supported by significant improvements in social validation and invalidation scores. Qualitative themes highlighted the significance of validation, specifically, bereavement processing and sharing and collaboration. Participants reported that sharing with the studio facilitators was more frequently reported as a key aspect of the studio than sharing with peers.

Non-face-to-face support was also represented in this review. Resources given to those bereaved by suicide to provide information and practical support may alleviate associated anxieties concerning the legal process that occurs when there has been a death by suicide. Hawton et al. (2012) evaluated a UK online resource, Help is at Hand and found that organisations were more likely to access the resource than bereaved individuals. Participants reported that the overall format and content of the resource was appropriate. Web-based forums may also be effective in supporting people bereaved by

suicide. Kramer et al. (2015) evaluated two sister forums, one in Belgian and one in Dutch and found that at 12 months there were significant improvements in grief, depression and well-being. Two thirds of participants reported some benefit from using the forums. These studies suggest that online resources can be useful in supporting people bereaved by suicide.

In summary, these findings suggest that postvention support for individuals bereaved by suicide is effective in reducing various health and psychological outcomes associated with being bereaved by suicide. One of the significant findings is that a mechanism that seems to be most effective is for suicide bereaved individuals to have some kind of access to others, creating a sense of community and belonging around themselves. This may be through peer support, group support, contact with those previously bereaved by suicide who are now in a supportive role or indeed through trained postvention support workers. Studies have also shown that postvention can be cost-effective in monetary value but also in psychological facts and life expectancy.

Quality Assessments of Components of Effective Models of Postvention. There is an ongoing debate as to which model of postvention would deliver adequate postvention support. Andriessen et al. (2019) defined suicide postvention service model as a "coordinated approach to providing support to people impacted by the death of a family member, friend or person in a network (such as a school, nursing home, workplace, etc.) through suicide." Questions surrounding who should deliver and how services should be delivered are discussed. Health services delivering postvention support may be suitable. Ligier et al. (2020) found that individuals bereaved by suicide who did not receive professional help from health care professionals felt that they may have benefitted from such support. On average, participants received a call from a health care professional within 66 days of the suicide. Pettersen et al. (2015) reported reasons for seeking help from health services in Sweden was to cope with grief, facilitate social relationships and search for meaning making. Reasons to not seek help from health services included the lack of trust in health professionals, incapability due to grief responses and no experienced need for help from health professionals. This study concludes that health services should offer immediate and repeated contact, empathy, personal meetings, information and grief-related support. Feigelman et al. (2020) found that nearly half of participants received positive support and responses from physicians. However, a small number of respondents reported doctor expressed a negative opinion about the deceased, doctors expressed a negative opinion about the way they died, doctors said things that they felt were hurtful or dismissive. Over half reported that their doctor offered medication to help deal with the loss. 48% reported the doctor suggested a referral to mental health resources and 34% stated doctors suggested resources in the community such as a support group. These studies suggest that support from health services could be of benefit. However, attempts should be made to improve the experience of those seeking support from health professionals to ensure that suicide bereavement support is sensitive to the needs of those bereaved.

Peer support models may also be beneficial. Bartone et al. (2018) found that effective peer support programs for the bereaved should be confidential and easily accessible interventions that provide a safe environment. Interventions should employ peer supporters with similar shared experiences to clients but should also select peer supporters carefully and ensure that peer supporters are trained. Professional mental health providers should also be involved in peer support. Peer support should also provide care and monitoring for peer supporters.

Farragh (2018) assessed teachers' ability to support children experiencing the suicide of a classmate or friend within the school community. This study found that teachers feel unprepared to support students and felt that school counsellors were critical or essential in supporting teachers as school counsellors had expertise in this area. Teachers interviewed in this study reported that they were unaware of school policies in dealing with student suicide and were unsure who or how the school crisis plan was implemented. Teachers felt that they supported students as best as they could, suggesting they wanted to be of support but felt that school response plans were inconsistent. Therefore, it may be reasonable to suggest that teachers could be supported by other professionals when a suicide occurs in the school community.

Goodwin-Smith et al. (2013) aimed to understand how postvention could support Aboriginal individuals bereaved by suicide in Australia. Results suggested that Aboriginal people should be involved in service delivery to demonstrate "walking together". This suggests the importance of models of postvention involving the very community that they support in order to maximise effectiveness and service delivery. Tiatia-Seath et al. (2019) assessed the needs of pacific communities and found that service providers were no more aware of postvention support available than community members. The majority of service providers were unaware of group discussions (known as fono by this community). 25.9% of service providers were dissatisfied with resources and 23% felt the materials had limited or no effectiveness. These findings suggest that communities would benefit from working with service providers who provide culturally appropriate support. Service providers felt that health professionals, churches and community leaders were best placed to lead postvention in this community.

Furthermore, Trimble et al. (2012) found that individuals bereaved by suicide valued the helpfulness of social support and saw support groups as a vehicle to contextualise and normalise feelings. There was a desire for understanding and knowledge from professionals and an acknowledgement of the traumatic nature of bereavement by suicide. This suggests that models of postvention may be most beneficial when they include peer support, group intervention and intervention from professionals. Furthermore, Dyregrov (2002) found that 85% of parents bereaved by suicide had received some kind of support from professionals. Community professionals believed that medical doctors, psychiatric nurses and public health nurses were common supportive professionals. However, individuals bereaved by suicide felt that undertakers were significant helpers, which was not reflected in community professionals' beliefs. Supportive counselling was most often received and provided for, as reported by 80% of the bereaved and 86% of the local authorities. However, only 26% of the parent

survivors had participated in support groups, whereas 40% of the local authorities reported to have such group. The study concluded that local authorities lack the ability to fulfill expectations of those bereaved by suicide.

Web-based models have been evaluated, with Chapple and Ziebland (2011) finding that a minority of people had no access to a computer or preferred not to use the internet in this way. However, few adverse effects of internet support were found and there was evidence that the internet could be beneficial. Furthermore, Feigelman et al. (2008) found that internet support was utilised to similar levels by those in urban, cities and rural areas. Factors which users found to be beneficial were that internet support has no time constraints as it is constantly accessible, there are also opportunities to meet face-to-face. Out of 104 participants, only 6 experienced worsening depression due to internet support. However, internet support users felt greater stigmisation than those accessing face-to-face support. Furthermore, Westerlund (2020) found that higher online support use was related to more satisfaction with psychosocial health. However memorial websites did seem to have the opposite effect as participants had increased rumination. This study suggests that online support groups may be an effective model, however memorial websites may cause further emotional distress.

Pietilä (2002) found that half of participants had participated in support groups which enabled communication about the suicide and influenced meaning-making. Participants reported finding benefit from group participation as it helped to normalise their experiences. Anonymous groups were found to be easier and more accessible than family support, with the ability to be honest and talk openly most valued by users.

Juhnke and Shoffner (1999) evaluated using a model known as Adapted Critical Incident Stress Debriefing. However, as this study uses general comments and anecdotal evidence, there is insufficient empirical data to suggest acceptability of this model of postvention and therefore, we cannot determine whether this model to be effective in supporting those bereaved by suicide.

In summary, models of postvention should involve the community they serve, and be timely and culturally appropriate. Successful models include community-based support which could utilise peer and professional support. Group postvention models may also be effective in creating a community around bereaved individuals, enabling them to talk about their grief without being judged and normalising their experiences. Internet support may also supplement this but may not be suitable for everyone. For young people, school-based models may be effective to address bereavement in the school community.

Discussion

To our knowledge, this review of postvention services is the first to include noncontrolled and qualitative studies within the analysis. The aim of this systematic review was to assess research which evaluates postvention services supporting those bereaved by suicide. Secondly it aimed to assess the acceptability of methods of postvention in terms of community support, peer support, group support and internet support. This review showed that evaluations on specific postvention services were mostly rated as medium or high. Successful evaluations on effectiveness and cost-effectiveness included the Standby service in Australia, SOBS groups, the LOSS service, art projects, online forums and the Help is at Hand online resource. Ongoing evaluation of postvention services would enable the services to continue offering a good standard of care for beneficiaries. This supports Andriessen et al.'s (2017) findings that postvention research should be theory-driven and increase intercultural collaboration. Resources made available to individuals bereaved by suicide may be beneficial to alleviate some of the anxieties caused by the legal process which concurs with Jacoby's (2002) findings that individuals bereaved by suicide felt highly distressed by legal procedures, specifically the coroner's office and the inquest. Similar levels of distress were caused by the media reporting of their loved one's suicide and postvention services should address these experiences. Therefore, providing practical and informative support may be a valuable part of any postvention service.

Postvention research reviewed in this paper rarely included experts, professionals working in suicide and those bereaved by suicide using qualitative methods. It would be beneficial for further research to assess the effectiveness of suicide postvention support services to assess both the professional and peer support provided to those bereaved by suicide. Using qualitative evaluation methods will enable those bereaved by suicide to explore their experiences and needs. This review also reported that models of postvention services should include community-based interventions and group interventions, which could be supported by online interventions. Young people and school communities would also benefit from support within the school environment. Andriessen et al., (2019) recommended that a public health model of postvention can allow for a tailor-made approach to service delivery and meet the needs of bereaved individuals. They suggest that models can range from information and awarenessraising targeting all people bereaved by suicide to specialised psychotherapy for those bereaved people who experience high levels of grief and symptoms of poor mental health. This also supports Ali and Lucock's (2020) recommendations that services should be tailor-made and flexible in the timing and duration. Furthermore, Campbell (1997) suggested that adequate and early postvention services may normalise the grief process after suicide, identify more at-risk survivors, and reduce the risk of further suicides. Campbell (1997) suggested that an active model of postvention rather than a passive one would improve outcomes for those bereaved by suicide. It concludes that increasing access to support through community postvention services, the impact of postvention services can facilitate the grief process while providing information about resources in the community. The long-term consequences of suicide may be averted if the problems of access to services and awareness of resources could be overcome. Dyregrov (2011) recommended that postvention support should adapt to meet each individual bereaved person's needs and therefore, any postvention model should include support that meets the needs of the community it supports.

This review highlights the lack of evaluations on UK interventions, with only two services included in this review; one on the effectiveness of the SOBS groups and another on the Help is at Hand online resource. There has been little to no research completed on the effectiveness of postvention services, with Australia and the US leading the way on postvention services evaluations. Furthermore, limited research has been done on the acceptability of models of postvention.

Some issues were highlighted by this systematic review. Firstly, it highlighted n = 4postvention evaluation studies and n = 1 acceptability paper was poorly conducted and discussed. Studies were rated as poor due to not having clear research questions and it being unclear if the data collected could address the research aims. To address this, the author of this review also considered papers which did not have research questions but did have clear aims. Due to this, one paper was rated high rather than medium (Ali & Lucock, 2020). Furthermore, MMAT ratings indicated a distinct lack of rationale for using mixed-methods design, and where rationale was given, this was often unclear. Furthermore, many mixed methods studies did not adhere to the quality criteria for each tradition of the methods involved. Therefore, many mixed-methods papers were rated lower. One study rated poorly was a debriefing model of postvention (Juhnke & Shoffner, 1999). This study was a qualitative study which did not provide enough of a rationale and outline adequate evidence for the acceptability of such a model. Much research has been conducted on debriefing professionals when they experience a suicide in their professional capacity, however very little research has been done on the acceptability of debriefing suicide bereaved individuals. Therefore, this review cannot conclude that this model would or would not be of benefit and further research would need to be done.

Some services had many evaluations, in the case of Standby, four evaluations of their service were included in this review. This may be simply because they could have the resources or funding to have ongoing evaluation, thus proving their effectiveness. Other services may be just as effective, but we have been unable to evidence this. One reason for this may be due to inadequate reporting, for example, the WAVES evaluation, was rated as poor due to not adequately outlining research aims and methodology. Therefore, it may be that the WAVES service is a successful service, but the paper outlining the service has been rated as poor due to the quality of the research paper. Other services may have found it difficult to access funding or resources for evaluation.

Other issues reported were incomplete data sets and groups being incomparable at baseline. Some studies had low retention rates and small sample sizes. Samples were overwhelming Caucasian women in most of the papers discussed in this review. There was also self-selection bias in many of the studies, as evaluations focused on individuals who were supported by the services and had volunteered to participate. Therefore, individuals who took part may be the most satisfied with their experiences with the service. Some studies had multiple intervention arms but no control groups. (Scocco et al., 2019; Constantino et al., 2001; Ryan et al., 2013). Furthermore, some studies with control groups were matched 4:1 and were significantly different in ages and other factors (Visser et al., 2014: Comans et al., 2013). However, it is important to note that this review aimed to evaluate qualitative and mixed methods postvention

evaluations as the author aimed to determine whether a non-controlled approach would yield stronger quality of studies that also allowed us to gain insight into the experience of being bereaved by suicide, creating services which are providing a good standard of support. As such, concerns about quantitative studies were expected.

Studies were rated using MMAT scores, which has different questions for studies with the following methods: qualitative, quantitative randomised controlled trials, quantitative non-randomised, quantitative descriptive and mixed methods. For mixed methods studies, to answer the final question, the rater must complete the questions for both components of the mixed methods (for example, qualitative and quantitative nonrandomised). The questions are different for each method. Therefore, some studies may have confounding variables or a sample which is non-representative, if the questions for that method do not feature those criteria, this study will have been rated higher. The researchers have endeavored to discuss that in the reporting of the studies. Furthermore, the ratings were based on three answers; "yes", "no" and "can't tell", for example, if the researchers could "not tell" if confounders were accounted for in the design and analysis of a qualitative non-randomised study, this was rated the same as if the study did not account for confounders. Therefore, studies where there was no clear discussion on the corresponding criteria were rated the same if they did not include this information. The extent to which a study was reported with clarity was crucial. However, it was felt that due to the wide range of methods, using one peer-validated tool to assess the studies would be beneficial.

Future Research

Future research should focus on longitudinal studies to evaluate the services' longitudinal effectiveness. Studies with appropriately matched control groups would enhance research evaluating postvention services. Finally, more resources should be made available to services to enable them to evaluate effectiveness and ensure the longevity of services that prove to be effective in supporting people bereaved by suicide.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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Supplemental Material

Supplemental material for this article is available online.

References

- Aguirre, R. T., & Terry, L. F. (2013). The LOSS team: An important postvention component of suicide prevention: Results of a program evaluation. In *Routledge international handbook of clinical suicide research* (pp. 321–330). Routledge.
- Ali, F., & Lucock, M. (2020). 'It's like getting a group hug and you can cry there and be yourself and they understand'. Family members' experiences of using a suicide bereavement peer support group. *Bereavement Care*, 39(2), 51–58. https://doi.org/10.1080/02682621.2020.1771951
- Andriessen, K., Dransart, D. A. C., Cerel, J., & Maple, M. (2017). Current postvention research and priorities for the future. Crisis.
- Andriessen, K., & Krysinska, K. (2012). Essential questions on suicide bereavement and postvention. *Int J Environ Res Public Health*, 9(1).
- Andriessen, K., Krysinska, K., Hill, N., Reifels, L., Robinson, J., Reavley, N., & Pirkis, J. (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), 1–15. https://doi.org/10.1186/s12888-019-2020-z
- Barlow, C. A., Waegemakers Schiff, J., Chugh, U., Rawlinson, D., Hides, E., & Leith, J. (2010). An evaluation of a suicide bereavement peer support program. *Death Studies*, 34(10), 915–930. https://doi.org/10.1080/07481181003761435
- Bartik, W. J., Maple, M., & McKay, K. (2020). Youth suicide bereavement and the continuum of risk. Crisis.
- Bartone, P. T., Bartone, J. V., Gileno, Z., & Violanti, J. M. (2018). Exploration into best practices in peer support for bereaved survivors. *Death Studies*, 42(9), 555–568. https://doi.org/10. 1080/07481187.2017.1414087
- Batzler, L. R. (1988). *The rising tide of suicide: A guide to prevention, intervention and postvention.* Hidden Valley Press.
- Bowden, C. (2011). Waves: A psycho-educational programme for adults bereaved by suicide. Bereavement Care, 30(3), 25–31. https://doi.org/10.1080/02682621.2011.617970
- Cain, A. C. (1972). Survivors of suicide. American Psychological Association.
- Campbell, F. R. (1997). Changing the legacy of suicide. *Suicide and Life-Threatening Behavior*, 27(4), 329–338. https://doi.org/10.1111/j.1943-278X.1997.tb00512.x
- Campbell, F. R., Cataldie, L., McIntosh, J., & Millet, K. (2004). An active postvention program. *Crisis*, 25(1), 30–32. https://doi.org/10.1027/0227-5910.25.1.30
- Centre for Mental Health. (2015). "Aiming for 'zero suicides': An evaluation of a whole system approach to suicide prevention in the East of England". https://www.centreformentalhealth. org.uk/Handlers/Download.ashx?IDMF=e423419a-f86b-48c7-9c83-7e3d33df4fc9
- Cerel, J., Brown, M. M., Maple, M., Singleton, M., Van de Venne, J., Moore, M., & Flaherty, C. (2019). How many people are exposed to suicide? Not six. *Suicide and Life-Threatening Behavior*, 49(2), 529–534. https://doi.org/10.1111/sltb.12450

- Cerel, J., & Campbell, F. R. (2008). Suicide survivors seeking mental health services: A preliminary examination of the role of an active postvention model. *Suicide and Life-Threatening Behavior*, 38(1), 30–34. https://doi.org/10.1521/suli.2008.38.1.30
- Cerel, J., McIntosh, J. L., Neimeyer, R. A., Maple, M., & Marshall, D. (2014). The continuum of "survivorship": Definitional issues in the aftermath of suicide. *Suicide and Life-Threatening Behavior*, 44(6), 591–600. https://doi.org/10.1111/sltb.12093
- Cha, J. M., Kim, J. E., Kim, M. A., Shim, B., Cha, M. J., Lee, J. J., Han, D. H., & Chung, U. S. (2018). Five months follow-up study of school-based crisis intervention for Korean high school students who experienced a peer suicide. *Journal of Korean Medical Science*, 33(28), e192. https://doi.org/10.3346/jkms.2018.33.e192
- Chapple, A., & Ziebland, S. (2011). How the internet is changing the experience of bereavement by suicide: A qualitative study in the UK. *Health*, 15(2), 173–187. https://doi.org/10.1177/ 1363459309360792
- Comans, T., Visser, V., & Scuffham, P. (2013). Cost effectiveness of a community-based crisis intervention program for people bereaved by suicide. Crisis.
- Constantino, R. E., Sekula, L. K., & Rubinstein, E. N. (2001). Group intervention for widowed survivors of suicide. *Suicide and Life-Threatening Behavior*, 31(4), 428–441. https://doi. org/10.1521/suli.31.4.428.22044
- Dyregrov, K. (2002). Assistance from local authorities versus survivors' needs for support after suicide. *Death Studies*, 26(8), 647–668. https://doi.org/10.1080/07481180290088356
- Dyregrov, K. (2011). What do we know about needs for help after suicide in different parts of the world? Crisis.
- Erangsen, A., & Pitman, A. (2017). Effects of suicide bereavement on mental and physical health.
- Farragh, E. A. (2018). Teacher support following death by suicide: An autoethnography of school counselor experiences within a rural school community. Central Michigan University.
- Feigelman, W., Gorman, B. S., Beal, K. C., & Jordan, J. R. (2008). Internet support groups for suicide survivors: A new mode for gaining bereavement assistance. *Omega-Journal of Death and Dying*, 57(3), 217–243. https://doi.org/10.2190/om.57.3.a
- Feigelman, W., Sanford, R. L., & Cerel, J. (2020). Do primary care physicians help the bereaved with their suicide losses: Loss survivor perceptions of helpfulness from physicians. *OMEGA-Journal of Death and Dying*, 80(3), 476–489. https://doi.org/10.1177/ 0030222817742822
- Gehrmann, M., Dixon, S. D., Visser, V. S., & Griffin, M. (2020). Evaluating the outcomes for bereaved people supported by a community-based suicide bereavement service. Crisis.
- Goodwin-Smith, I., Hicks, N., Hawke, M., Alver, G., & Raftery, P. (2013). Living beyond Aboriginal suicide: Developing a culturally appropriate and accessible suicide postvention service for Aboriginal communities in South Australia. *Advances in Mental Health*, 11(3), 238–245. https://doi.org/10.5172/jamh.2013.3645
- Harwood, D., Hawton, K., Hope, T., & Jacoby, R. (2002). The grief experiences and needs of bereaved relatives and friends of older people dying through suicide: A descriptive and casecontrol study. *Journal of Affective Disorders*, 72(2), 185–194. https://doi.org/10.1016/ s0165-0327(01)00462-1

- Hawton, K., Sutton, L., Simkin, S., Walker, D. M., Stacey, G., Waters, K., & Rees, S. (2012). *Evaluation of a resource for people bereaved by suicide*. Crisis.
- Hong, Q. N., Fàbregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., Gagnon, M. P., Griffiths, F., Nicolau, B., O'Cathain, A., Rousseau, M. C., Vedel, I., & Pluye, P. (2018). The mixed methods appraisal tool (MMAT) version 2018 for information professionals and researchers. *Education for Information*, 34(4), 285–291. https://doi.org/ 10.3233/efi-180221
- Jordan, J. R. (2001). Is Suicide Bereavement Different? A Reassessment of the Literature. Suicide and Life-Threatening Behavior, 31(1).
- Jordan, J. R., & McMenamy, J. (2004). Interventions for Suicide Survivors: A Review of the Literature. Suicide and Life-Threatening Behavior, 34(4).
- Juhnke, G. A., & Shoffner, M. F. (1999). The family debriefing model: An adapted critical incident stress debriefing for parents and older sibling suicide survivors. *The Family Journal*, 7(4), 342–348. https://doi.org/10.1177/1066480799074004
- Knight, J. A. (1992). The suffering of suicide: The victim and family considered (pp. 245–268). NLN Publications, (15-2461).
- Kramer, J., Boon, B., Schotanus-Dijkstra, M., van Ballegooijen, W., Kerkhof, A., & Van Der Poel, A. (2015). *The mental health of visitors of web-based support forums for bereaved by suicide*. Crisis.
- Ligier, F., Rassy, J., Fortin, G., van Haaster, I., Doyon, C., Brouillard, C., Seguin, M., & Lesage, A. (2020). Being pro-active in meeting the needs of suicide-bereaved survivors: Results from a systematic audit in Montréal. *BMC Public Health*, 20(1), 1–8. https://doi.org/10.1186/s12889-020-09636-y
- Maple, M., McKay, K., Hess, N. C., Wayland, S., & Pearce, T. (2019). Providing support following exposure to suicide: A mixed method study. *Health & Social Care in the Community*, 27(4), 965–972. https://doi.org/10.1111/hsc.12713
- McDaid, C., Trowman, R., Golder, S., Hawton, K., & Sowden, A. (2008). Interventions for people bereaved through suicide: Systematic review. *The British Journal of Psychiatry*, 193(6), 438–443. https://doi.org/10.1192/bjp.bp.107.040824
- McGeechan, G. J., Richardson, C., Weir, K., Wilson, L., O'Neill, G., & Newbury-Birch, D. (2018). Evaluation of a pilot police-led suicide early alert surveillance strategy in the UK. *BMJ Injury Prevention*, 24(4).
- Mitchell, A. M., Gale, D. D., Garand, L., & Wesner, S. (2003). The use of narrative data to inform the psychotherapeutic group process with suicide survivors. *Issues in Mental Health Nursing*, 24(1), 91–106. https://doi.org/10.1080/01612840305308
- Moustakas, C. E. (1994). Phenomenological research methods. Sage Publications, Inc.
- Office for National Statistics. (2020). "Suicides in England and Wales: 2020 registrations".
- Peters, K., Staines, A., Cunningham, C., & Ramjan, L. (2015). The lifekeeper memory quilt: Evaluation of a suicide postvention program. *Death Studies*, 39(6), 353–359. https://doi.org/ 10.1080/07481187.2014.951499
- Pettersen, R., Omerov, P., Steineck, G., Dyregrov, A., Titelman, D., Dyregrov, K., & Nyberg, U. (2015). Suicide-bereaved siblings' perception of health services. *Death Studies*, 39(6), 323–331. https://doi.org/10.1080/07481187.2014.946624

- Pfeffer, C. R., Jiang, H., Kakuma, T., Hwang, J., & Metsch, M. (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. https://doi.org/10.1097/00004583-200205000-00007
- Pietilä, M. (2002). Support groups: A psychological or social device for suicide bereavement? British Journal of Guidance and Counselling, 30(4), 401–414. https://doi.org/10.1080/ 0306988021000025600
- Pitman, A., Osborn, D., King, M., & Erlangsen, A. (2014). Effects of suicide bereavement on mental health and suicide risk. *The Lancet Psychiatry*, 1(1), 86–94. https://doi.org/10.1016/ s2215-0366(14)70224-x
- Pitman, A. L., Osborn, D. P., Rantell, K., & King, M. B. (2016). Bereavement by suicide as a risk factor for suicide attempt: A cross-sectional national UK-wide study of 3432 young bereaved adults. *BMJ Open*, 6(1), Article e009948. https://doi.org/10.1136/bmjopen-2015-009948
- Renaud, C. (1995). Bereavement after a suicide: A model for support groups. In *The impact of suicide* (pp. 52–63). Springer.
- Rodway, C., Tham, S. G., Ibrahim, S., Turnbull, P., Kapur, N., & Appleby, L. (2020). Children and young people who die by suicide: Childhood-related antecedents, gender differences and service contact. *BJPsych Open*, 6(3), Article e49. https://doi.org/10.1192/bjo.2020.33
- Rogers, J., Sheldon, A., Barwick, C., Letofsky, K., & Lancee, W. (1982). Help for families of suicide: Survivors support program. *The Canadian Journal of Psychiatry*, 27(6), 444–449. https://doi.org/10.1177/070674378202700602
- Ryan, M., Lister, R., & Flynn, L. (2013). Giving voice to those bereaved by suicide: The 'nothing prepared me for this' project. *Advances in Mental Health*, 11(3), 213–222. https://doi.org/ 10.5172/jamh.2013.11.3.213
- Schuyler, D. (1973). Counseling suicide survivors: Issues and answers. Omega, 4(4), 313–321. https://doi.org/10.2190/47ub-j1y7-f6pn-4b24
- Scocco, P., Zerbinati, L., Preti, A., Ferrari, A., & Totaro, S. (2019). Mindfulness-based weekend retreats for people bereaved by suicide (Panta Rhei): A pilot feasibility study. *Psychology* and Psychotherapy: Theory, Research and Practice, 92(1), 39–56. https://doi.org/10.1111/ papt.12175
- Strouse, S., Hass-Cohen, N., & Bokoch, R. (2021). Benefits of an open art studio to military suicide survivors. *The Arts in Psychotherapy*, 72, 101722. https://doi.org/10.1016/j.aip. 2020.101722
- Tiatia-Seath, J., Lay-Yee, R., & von Randow, M. (2019). Supporting the bereavement needs of pacific communities in New Zealand following a suicide: A survey of service providers.
- Trimble, T., Hannigan, B., & Gaffney, M. (2012). Suicide postvention; coping, support and transformation. *The Irish Journal of Psychology*, 33(2–3), 115–121. https://doi.org/10.1080/ 03033910.2012.709171
- Veale, A. (2014). Longitudinal evaluation of a therapeutic group work intervention with suicidebereaved children. *The Irish Journal of Psychology*, 35(4), 188–204. https://doi.org/10. 1080/03033910.2015.1058177

- Visser, V. S., Comans, T. A., & Scuffham, P. A. (2014). Evaluation of the effectiveness of a community-based crisis intervention program for people bereaved by suicide. *Journal of Community Psychology*, 42(1), 19–28. https://doi.org/10.1002/jcop.21586
- Westerlund, M. U. (2020). The usage of digital resources by Swedish suicide bereaved in their grief work: A survey study. OMEGA-Journal of Death and Dying, 81(2), 272–297. https:// doi.org/10.1177/0030222818765807

World Health Organisation. (2019). "Suicide: One person dies every 40 seconds".

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