# Post-suicide Intervention Programs: A Systematic Review

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#### **ABSTRACT**

**Objective:** The purposes of this study were: 1) to determine the effectiveness of suicide postvention programs on suicide attempts and suicide as well as grief symptoms, mental distress, and mental health broadly defined; and 2) to investigate their cost-effectiveness.

Methods: Computerized database searches (PubMed, PsycINFO, Cinahl, Cochrane Database, Crisis and Suicide & Life-Threatening Behavior) were performed in September 2009 to obtain evaluations of suicide postvention programs and in February 2010 (Centre for Research and Dissemination Database, Cochrane Database of Systematic Reviews, PubMed, PsycINFO, and Cinahl) to obtain cost-effectiveness analyses of bereavement programs. Hand searches of relevant articles and reviews were also conducted. Publications were included in the analysis if they described an evaluation/costeffectiveness analysis of a suicide postvention program, provided data, and were published in English-language peer-reviewed journals. There was no restriction on publication date. Studies were excluded if they were narrative systematic reviews or dissertations or if they described a postvention program but provided no evaluation. Because very few cost-effectiveness analyses were identified, articles describing "costs" of bereavement programs were also included. Studies were evaluated for quality using Centres for Evidence-Based Medicine Levels of Evidence, and for program effectiveness using Office of Justice Programs "What Works Repository" Analytic Framework.

Results: Of the 49 studies of suicide postvention programs retrieved, 16 met inclusion criteria for evaluation of study quality and evidence of effectiveness. Three target populations for postvention programs were identified: school-based, family-focused, and community-based. No protective effect of any postvention program could be determined for number of suicide deaths or suicide attempts from the available studies. Few positive effects of school-based postvention programs were found. One study reported negative effects of a suicide postvention. Gatekeeper training for proactive postvention was effective in increasing knowledge pertaining to crisis intervention among school personnel. Outreach at the scene of suicide was found to be helpful in encouraging survivors to attend a support group at a crisis centre and seek help in dealing with their loss. Contact with a counseling postvention for familial survivors (spouses, parents, children) of suicide generally helped reduce psychological distress in the short term. There was no statistical analysis of community-based suicide postvention programs; however media guidelines for reporting of suicide and suicide attempts have been adopted by mental health organizations in numerous countries. No analyses of cost-effectiveness of suicide postvention programs were found.

Conclusion: Recommendations to provide guidance to policy-makers, administrators and clinicians are presented and directions for future research are

Key words: Suicide; bereavement; tertiary prevention; program evaluation; cost; review

La traduction du résumé se trouve à la fin de l'article.

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uicide is a leading cause of death in Canada, especially among the youth population, in which it is ranked second only to motor vehicle collisions. As such, it represents an important public health problem that requires action. Although a three-part prevention model including primary (universal), secondary (targeted and indicated) and tertiary prevention is espoused within public health strategies to address suicide (e.g., Canadian Association for Suicide Prevention Blueprint2), the approach towards suicide intervention has historically prioritized secondary and tertiary prevention. Primary prevention is usually applied universally to the whole population to prevent the occurrence of a particular event, whereas secondary prevention typically takes the form of interventions targeted towards individuals displaying specific risk factors. With respect to suicide prevention, secondary prevention is applied when populations/individuals displaying signs of heightened risk come into contact with the mental health system through the use of crisis services such as telephone "hotlines" or crisis counseling services, or through hospital-based programming, such as a psychiatric consultation in the emergency department. Tertiary prevention generally takes the form of "postvention" services, defined as prevention strategies that target individuals after (post) an event. In the case of suicide, postvention services target those individuals recently bereaved by the death of a loved one. The intention of postvention programming is to aid the grieving process and reduce the incidence of suicide contagion through bereavement counseling and education among "survivors", encompassing family, friends, classmates, etc. who are affected by the death.

The purposes of this study were: 1) to determine the effectiveness of suicide postvention programs on suicide attempts and suicide as well as grief symptoms, mental distress, and mental health broadly defined; and 2) to investigate their cost-effectiveness. In order to provide a robust evaluation of effectiveness, two frameworks were used to evaluate study quality and evidence of effectiveness. The Centre for Evidence Based Medicine (CEBM) framework<sup>3</sup> was used to evaluate study design and methodology to determine quality of evidence available for an intervention, and the Office of Justice Programs "What Works Repository" (OJP) framework<sup>4</sup> was used to evaluate evidence from studies of interventions.

#### **METHODS**

#### Literature search

**Program Effectiveness** 

Computerized database searches were performed in September 2009 to obtain original research articles examining suicide prevention

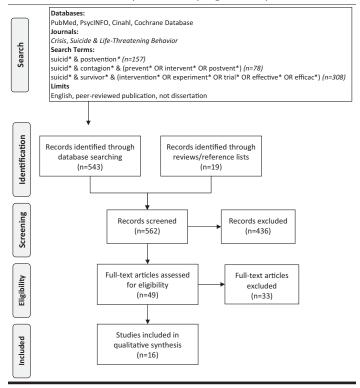
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Figure 1. Flow chart of literature search results for effectiveness of suicide postvention programs, September 2009

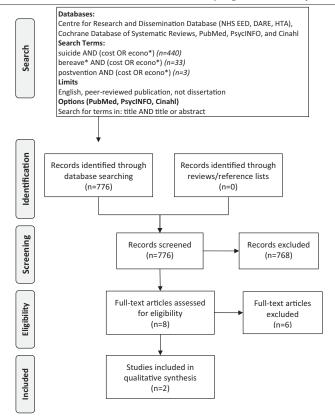


programs. PubMed, PsycINFO, Cinahl, and the Cochrane Database as well as the journals Crisis and Suicide & Life-Threatening Behavior were queried for peer-reviewed articles with no restrictions on publication date, using the following search terms: (suicid\* AND postvention\*) OR (suicid\* AND contagion\* AND (prevent\* OR intervent\* OR postvent\*)) OR (suicid\* AND survivor\* AND (intervent\* OR experiment\* OR trial\* OR effective\* OR efficac\*)) (see Figure 1). A hand search of relevant articles and reviews was also conducted. Publications were included in the analysis if they described an evaluation of a suicide postvention program and provided data (including case studies), and were published in English. Studies were excluded if they were narrative systematic reviews or dissertations, or if they described a postvention program but provided no evaluation. In addition, studies that explicitly examined psychological debriefing or critical incident stress debriefing/management were excluded, since two recent Cochrane reviews provide substantive coverage of this area.5,6

#### Cost-effectiveness

Computerized database searches were performed in February 2010 to obtain original research articles examining cost-effectiveness of bereavement programs using Centre for Research and Dissemination Database (including NHS EED, DARE, HTA), Cochrane Database of Systematic Reviews, and PubMed, PsycINFO and Cinahl. Databases were queried for peer-reviewed articles published in Englishlanguage journals with no restrictions on publication date using the following search terms: (suicide AND (cost OR econo\*)) OR (bereave\* AND (cost OR econo\*)) OR (postvention AND (cost OR econo\*)) (see Figure 2). For the purposes of this review, costeffectiveness analysis was defined as the comparison of the cost of one intervention with the cost of another intervention, with respect to a given outcome. Since no study examined bereavement

Figure 2. Flow chart of literature search results for costeffectiveness of bereavement programs, February 2010



by suicide, we decided to widen the search and include analyses of any bereavement programs.

# **Evaluation of suicide postvention programs**

Descriptive information abstracted from suicide postvention programs included author(s); year of publication; full title; source database or journal; target population; study methodology; intervention type; setting; duration; manualization; topics; proposed mechanism; prevention strategy; number and age of participants; clinician type; control status; randomization status; length of follow-up; drop-out rates; outcome measures; and reported effects (see Table 1). All suicide postvention programs identified from studies were evaluated using two quality of evidence frameworks: Centre for Evidence Based Medicine (CEBM) framework,3 which evaluates study design and methodology to determine quality of evidence available for an intervention (see Table 2); and the Office of Justice Programs "What Works Repository" (OJP) framework<sup>4</sup> which evaluates interventions based on study methodology, effect size, and replication, classifies programs based on evidence of effectiveness and assists communities select and replicate evidencebased programs (see Table 3).

#### **RESULTS**

#### **Characteristics of included studies**

In total, 49 original research and review articles were reviewed for analysis in this study. Articles were included if they formally evaluated a program and provided quantitative data from the evaluation, with no stipulation on study design. Sixteen articles were selected for analysis to determine the effectiveness of the reported program-

Author Year	Callahan 1996	Grossman et al. 1995	Hazell & Lewin 1993		
Title	Negative effects of a school suicide postvention program - a case example	Strategies for school-based response to loss: Proactive training and postvention consultation (see Mackesy-Amiti, et al., 1996)	An evaluation of postvention following adolescent suicide		
Source database	PubMed	PubMed	PubMed		
Target population	Middle school students	School personnel	High school students		
Study methodology	Case report	Field experiment	Case-control study		
Intervention: type	"Standard postvention activities" including debriefing	Crisis response training of high school personnel	Counseling at school, groups of 20-30 students (close friends)		
Intervention: setting	1 middle school in Midwestern USA	High schools in three counties in greater Chicago area	School		
Intervention: duration/sessions	ND	19 x 3-hour sessions over 1 year (1 session=complete training)	90 min		
Intervention: manualized?	ND	Based on "Preparing for Crisis" (Underwood & Dunne-Maxim, 1993)	Described elsewhere (Hazell, 1991)		
Intervention: topics	Gave confirmed details to school pop'n, support rooms staffed by school counselors and social workers w/ invitation to students to attend if desired; ongoing support groups focused on suicide; teache mtgs to gauge students' response; details about funeral, parent mtg		Described elsewhere (Hazell, 1991)		
Intervention: Proposed mechanism	ND	ND	ND		
Subjects (n)	400	400 "caregivers" in 53 schools	126 (Tx: 63 vs. No Tx: 63)		
Subjects (age)	Grade 7-8	ND	School A: mean age 15.1 yrs; School B: mean 14.4 yrs		
Clinician type	"Suicidologist" employed by community agency	"Multidisciplinary team of experienced mental health and educational professionals as well as a Ronald McDonald Children's Charities representative"	Child psychiatrist or trainee psychiatrist, with assistance of senior school staff		
Control?	ND	No	Yes		
Randomization?	ND	No	No		
Follow-up	6 months	ND for all; outcome 1: immediate	8 months		
Drop out (n, %)	NA	Knowledge test results available for n=263 (66%) participants (Outcome 1)	0%		
Outcomes measured (1, 2, 3, 4, etc.)	1: Suicide attempts; 2: Suicide deaths	Changes in knowledge/skills;     Participants' satisfaction, utility of training	1: Youth Self Report Behavior Scale (YSR) & Risk Behavior Questionnaire (RBQ); 2: SI and behavior profile; 3: Drug and alcohol use		
Effect1	1: No statistical analysis reported, 6 hospitalizations (vs. 0-1 per school year in past); 30 suicide gestures or attempts brought to attn of school social worker (vs. 1-2 per term / 2-4 per year)	1: Mean increase of 9.2% on knowledge test; no formal performance evaluation of skills	1: YSR and RBQ - no sig diffs		
Effect2	2: No statistical analysis reported	2: Satisfaction ratings >80% except length (too short); half of participants reported highest possible rating for utility (no more specific data available)	diffs; hospitalization for SA - no sig diff;		
Effect3			3: Drug and alcohol use - no sig diffs		
ND = not described Tx = treatment	FTT = first talk-through (program) Cx = control	ITT = intent-to-treat MH = mental health	PD = psychological debriefing NA = not applicable		

ming: three randomized controlled trials (RCTs), 7-9 two ecological studies,10,11 and eight pre-/post-test trials - four with control groups12-15 and four without,16-19 as well as three case reports.20-22 Target populations for the postvention programs were school-based,14,16-18,20,21 family-focused7-9,12,13,15,19,22 and community-based.10,11

# School-based suicide postvention programs

A variety of school-based suicide postvention programs are described in the evaluation literature, including two supportive counseling interventions for close friends of the deceased, 14,16 two interventions aimed at whole school populations that include psychological debriefing components, 20,21 and two crisis training programs for school personnel.17,18

Outcomes measured in evaluations of school-based suicide postvention programs included direct outcomes, such as number of suicide deaths and attempts<sup>20,21</sup> and suicidal ideation,<sup>14</sup> and numerous distal outcomes, such as youth self-report behaviour scale, risk behaviour questionnaire, drug and alcohol use;14 social acceptance, conduct/morality, and self-efficacy scale.16 Outcomes of two evaluations of the same school personnel crisis training program were changes in knowledge<sup>17,18</sup> and satisfaction with the program.<sup>17</sup>

## Quality of Evidence

Quality of evidence of evaluations of school-based suicide postvention programs ranged from very low (case reports including expert opinion with/without critical appraisal)20,21 to moderate (pre-/post-

Table 1a. continued	Characteristics of Evaluations of Sch	nool-based Suicide Postvention Progr	rams
Author Year	Mackesy-Amiti et al. 1996	Poijula et al. 2001	Sandor et al. 1994
Title	Assessment of knowledge gains in proactive training for postvention (see Grossman et al., 1995)	Adolescent suicide and suicide contagion in three secondary schools	Competence-building in adolescents, Part ii: community intervention for survivors of peer suicide
Source database	PubMed	PubMed	Cinahl
Target population	School personnel	Schoolmates of deceased	Peers of deceased (church-related youth group)
Study methodology	Pre-/post-test	Quasi-experimental	"Descriptive comparative analysis"
Intervention: type	Gatekeeper training	Psychological debriefing	"Supportive community intervention"
Intervention: setting	High schools in Illinois	3 secondary schools in Finland	Church
Intervention: duration/sessions	12 x 3-hour sessions over 4 mo (1 session=complete training)	FTT ?hrs / PD 2 hours	1: 2h debriefing on "evening following the suicide"; 2: educational session 2 days after suicide (t?); 3: memorial service 3 days after suicide
Intervention: manualized?	Based on "Preparing for Crisis" (Underwood & Dunne-Maxim, 1993)	FTT?/PD Yes	No
Intervention: topics	Preparing for crisis training	FTT: "emotional first aid", "facts are shared", "mutual support can be activated"; PD: group discussion in class, "the phases of the PD in schools are introduction, facts, reactions, information and closure"	1: Accurate info about suicide, time to "express anger and question what the event meant for them" (debriefing); 2: How to get help for depression and suicide, suicide prevention hotline contacts
Intervention: Proposed mechanism	ND	"Facts are shared, and mutual support can be activated", "effort to prevent suicide contagion"	ND
Subjects (n)	205	89	15
Subjects (age)	ND	Range: 13-17	Range: 14-17 (mean: 15.73)
Clinician type	"Multidisciplinary team of experienced MH and educational professionals" + Ronald McDonald Children's Charities rep	MH professional (clinical psychologist), teachers	NA Youth Minister
Control?	No	No a priori control group	Yes (n=19)*control had neither exposure NOR Tx
Randomization?	No	No	No
Follow-up	Immediate	4-year "Surveillance of schools", no follow-up with debriefed students	t1: baseline; t2: 2 days; t3:2 mo
Drop out (n, %)	23% (n=58)	NA	No ITT; 3 participants w/o complete data were dropped (17%)
Outcomes measured (1, 2, 3, 4, etc.)	1: Knowledge gain	1: Incidence of suicide	1:social acceptance; 2: athletic competence; 3: physical appearance; 4: job competence; 5: romantic appeal; 6: conduct/morality; 7: self-efficacy scale
Effect1	1: Mean increase of 8.9% on knowledge test (effect size = 0.79 = large)	1: No new suicides appeared during 4-yr. follow-up period in schools where FTT and PD had been conducted by MH professional. Where teacher had conducted Tx, also no new deaths; where no Tx in one class in school where all other involved classes had received intervention by teacher, student committed suicide at 2 mo. follow-up	1, 4, 8 sig better at t2 for Tx vs. Cx
Effect2			8 sig better at t3 for Tx vs. Cx
ND = not described Tx = treatment	FTT = first talk-through (program) Cx = control	ITT = intent-to-treat MH = mental health	PD = psychological debriefing NA = not applicable

test with control group and 8 months follow-up).14 No randomized controlled trials of school-based suicide postvention programs were found.

### Evidence of Effectiveness

No protective effect of school-based suicide postvention programs can be determined for number of suicide deaths or suicide attempts from the available studies, since both of the evaluations that reported these outcomes were case reports, and neither provided statistical analysis. 20,21 One case report described a "negative effect" of a psychological debriefing-type suicide postvention program implemented after two middle school students committed suicide, with 6 hospitalizations and 30 suicide gestures or attempts brought to

the attention of the school social worker in the six months following the postvention.<sup>20</sup> Due to the low quality of evidence attributable to a case report, however, this result should be interpreted with caution.

No significant effect of a counseling intervention for close friends of the deceased on the youth self-report behaviour scale, risk behaviour questionnaire, or on drug and alcohol use, current suicidal behaviour, hospitalization for suicide attempt, or suicidal ideation after 8 months was reported.14

The only significant effect of a youth-group-based debriefingtype intervention and educational session aimed at close friends of the deceased sustained at the 2-month follow-up was an increased score on a self-efficacy scale among youth who had experienced

Author Year	Battle 1984	Cerel & Campbell 2008	Constantino & Bricker 1996		
Title	Group therapy for survivors of suicide	Suicide survivors seeking mental health services: A preliminary examination of role of active postvention model	Nursing postvention for spousal survivors of suicide		
Source database	PsycINFO	PubMed	PubMed		
Target population	Adult "survivors" (NOS)	Adult "survivors" (NOS)	Widow(ers) whose spouses died of suicide		
Study methodology	Case report	Retrospective case control	RCT		
Intervention: type	Support group with informal educational component	Outreach to survivors at scene of suicide	Group-based supportive nursing intervention		
Intervention: setting	ND	Scene of suicide	ND		
Intervention: duration/sessions	1.5hr/week for 4 mo, 1.5hr/2weeks for 4 mo	1x outreach at scene of suicide	1.5h/1 week x 8 weeks		
Intervention: manualized?	No	No	No		
Intervention: topics	"Psychodynamics of suicide, victim's motivations, survivor's relationship with victim, unresolved problems"	Provide comfort; explain protocols in death investigation; answer questions	BGP: emphasizes Yalom's 12 curative factor of group psychotherapy; SGP: promotes principles of socialization, recreation, leisur		
Intervention: Proposed mechanism	Catharsis through sharing with others	Outreach would reduce the amount of time between death and seeking treatment by survivors	Promotion of psychosocial well-being of surviving spouses by mediating grief reactions through therapeutic group interactions and activities		
Subjects (n)	36	397	32		
Subjects (age)	Range: 14-66; average: 38	Range 18-89 years	Mean age 43		
Clinician type	ND (Memphis Crisis Intervention Service)	Crisis center staff + trained volunteer survivors	Psychiatric nurses (4, MN level)		
Control?	Yes, n=13	Active Postvention (n=150) vs. Passive Postvention (n=206); 41 excluded	Bereavement group postvention (n=16) vs Social group postvention (n=16)		
Randomization?	No	No	Yes		
Follow-up	Immediate post-intervention	Duration of study: 1999-2005	Immediate post-intervention		
Drop out (n, %)	n=17 attended 1-4 sessions only (n=47%)	NA	No		
Outcomes measured (1, 2, 3, 4, etc.)	Number of sessions attended,     Reason for stopping/belief re: Tx outcome	1: Time elapsed between death and intake for support services; 2: Attendance at support group meetings; 3: Intensity of attendance; 4: Appetite, exercise, sleep, concentration; 5: Current SI	1: BDI; 2: Brief symptom inventory (somatization, OC, interpersonal sensitivity depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism); 3: Social Adjustment Scale; 4: Grief Experience Inventory		
Effect1	1: n=17 attended 1-4 sessions; n=8 attended 5-9 sessions; n=10 attended 10-14 sessions; n=1 attended 15 sessions	1: APM presented for intake significantly sooner than PP	1: Sig reduction in depression in both group		
Effect2	2: 61% reported they had been helped by the support group; 27% did not feel group could help them any further but were still suffering; 12% were not helped at all	2: APM significantly more likely than PP to attend support group mtg	2: BGP: sig reduction in OC; SGP: sig reduction in OC, depression, anxiety, phobic anxiety		
Effect3		3: APM attended significantly more mtgs than PP	3: BGP: no sig diffs; SGP: sig diffs in social adjustment scale		
Effect4		4: No sig diffs	4: Sig reduction in despair, anger/hostility, guilt, rumination, depersonalization; SGP: sig reduction in despair, rumination, depersonalization		
Effect5		5: No sig diffs			
APM = active postvention mode PP = passive postvention (can b	rial BDI = Beck Depression Inventory NA = not applicable vention (can be defined within table Consta el (can be defined within table Cerel & Cam e defined within table Cerel & Campbell, 21 (can be defined within table Constanto & I	pbell, 2008) 008)	NOS = not otherwise specified ND = not described		

both the suicide and the intervention compared to youth who had experienced neither the suicide nor the intervention.<sup>16</sup>

The evaluations of a postvention program aimed at training school personnel in crisis intervention reported significant increases in knowledge (n=205, mean increase=8.9%18; n=263, mean increase=9.2%17), with high ratings for participant satisfaction and utility.<sup>17</sup>

## Family-focused suicide postvention programs

The family-focused suicide postvention programs included in this analysis consist of support group interventions provided to adult suicide survivors generally, 15,19,22 as well as a more specific intervention aimed at widows/widowers,7,8 parents,9\* and children13 bereaved by suicide. Program delivery was by crisis centre staff<sup>22</sup> and volunteers, 19 psychiatric nurses, 7,8 a clinical psychologist, 13 and clinician teams consisting of psychologists, nurses and family therapists;9 program duration ranged from 1.5 hours per week for 8 weeks<sup>7,8</sup> to 1.5 hours per week (first 4 months) and 1.5 hours biweekly (second 4 months) for 8 months.<sup>22</sup> One study evaluated an "active postvention" program run by a crisis centre that pro-

Program for parents bereaved by violent death of children 12-28 years old: accidental death (57%), suicide (24%), homicide (10%), not classified by medical examiner (9%). Results presented for all causes of death combined.

Table 1b. continued	Characteristics of Evaluations of Fair	nily-focused Suicide Postvention Pro	9141113
Author Year	Constantino et al. 2001	Farberow 1992	Murphy et al. 1998
Title	Group intervention for widowed survivors of suicide	The Los Angeles Survivors-After-Suicide program: An evaluation	Broad-spectrum group treatment for parents bereaved by the violent deaths of their 12-28-year-old children: RCT
Source database	PubMed	Ref from Clark, 2001	Ref from Clark, 2001
Target population	Widow(ers) whose spouses died of suicide	Adult survivors (NOS)	Parents bereaved by violent death of child (24% suicide)
Study methodology	RCT	Controlled study	RCT
Intervention: type	group-based supportive nursing intervention	Group discussion and readings for "help in working through their grief"	Information-giving & skill-building support + emotion-focused support group provided 2-7 mo post-loss
Intervention: setting	ND	ND	Community-based (5-10 participants per group)
Intervention: duration/sessions	1.5h/1 week x 8 weeks	1.5h/1 week x 8 weeks + optional monthly meetings thereafter	2h/1 week x 12 weeks
Intervention: manualized?	No	ND	No
Intervention: topics	BGP: emphasizes Yalom's 12 curative factors of group psychotherapy; SGP: promotes principles of socialization, recreation, leisure	ND	Topics: 1: emotional responses; 2: cognitive responses; 3: health responses; 4: parental role loss; 5: legal concerns; 6: marital or significant other relationships; 7: family relationships; 8: feelings toward others; 9: expectations for the future / Skills: 1: active confrontation of problems; 2: assessment of progress on closure; 3: respecting others' grieving styles; 4: self-care
Intervention: Proposed mechanism	Promotion of psychosocial well-being of surviving spouses by mediating grief reactions through therapeutic group interactions and activities	ND	Problem-focused support & mutual support
Subjects (n)	60	82 (Tx: 60, Cx: 22)	261 of 329 contacted (Tx:153 vs. standard care:108)
Subjects (age)	Range: 24-70 years	Range: 10-60+	Age 32-61
Clinician type	Psychiatric nurses (n=4, MN level)	Mental health professional (n=1) and post-program survivor with additional training (n=1)	"Men-women pairs of group leader- clinicians who were psychologists, nurses, or family therapists"
Control?	Yes (but combined for analysis)	Yes: Tx vs. no Tx	Yes: Tx vs. standard care
Randomization?	Yes	No	Yes
Follow-up	t1: immediate; t2: 6 mo; t3: 12 mo	t1: (retrospective) Within 1 month of death; t2: baseline; t3: immediate post-Tx	
Drop out (n, %)	13 did not complete, NO ITT	Completer analysis (No ITT)	Retention: t1: 90%Tx + 83% standard care; t2: 86%Tx + 79% standard care
Outcomes measured (1, 2, 3, 4, etc.)	1: BDI; 2: Brief symptom inventory (somatization, OC, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism); 3: Social Adjustment Scale; 4: Grief Experience Inventory (No sig diffs b/w groups on any measures, groups combined for t1 vs. t2 and t3 analysis)	shame or stigma, guilt, anger at self, anger at victim, puzzlement, suicidal ("estimate intensity of feelings: high,	1: Mental distress (Global Severity Index); 2: Post-traumatic stress symptoms (Traumatic Experiences Scale); 3: Loss accommodation (Grief Experiences Scale); 4: Physical health status (Health status/health behaviors scale); 5: Marital role strain (Dyadic Adjustment Scale)
Effect1	1: Marked and sig reduction in depression sustained to t3	1: Feelings: Tx had significantly higher "depression" and "puzzlement" vs. Cx at t3 (neither had been sig diff at t2); "grief", "shame", and "guilt" no longer significantly higher among Tx at t3	1: t1: Mothers: Tx had significantly lower overall mental distress - not sustained at t2; Fathers: no sig results; t2: Mothers: no sig results; Fathers: Tx had significantly lower overall mental distress
Effect2	2: Sig diffs for OC, depression, anxiety, phobic anxiety, paranoid ideation, psychoticism to t3	2: 92% Tx rated experience favourably; All rated program at least moderately to very beneficial (4-7 on scale 1-7); 50% felt too few sessions; 89% would recommend program to others	2: t1: Mothers: Tx had significantly lower PTSD score - not sustained at t2; Fathers: no sig results;
Effect3	3: Sig diffs on most subsets of social adjustment scale to t3		3: t2: Mothers: Tx had significantly lower grief responses score; Fathers: no sig results
Effect4	4: Sig diffs for despair, loss of control, rumination, depersonalization, somatization, death anxiety to t3		4: No effect
Effect5	,		5: No effect
Tx = treatment	Cx = control	ITT = intent-to-treat	

Table 1b. continued	Characteristics of Evaluations of Family-focused Suicion	le Postvention Programs				
Author Year	Pfeffer et al. 2002	Rogers et al. 1982				
Title	Group intervention for children bereaved by the suicide of a relative	Help for Families of Suicide: Survivors Support				
Source database	Ref from Andriessen, 2009	PubMed, PsycINFO				
Target population	Families with children	Adult immediate family members bereaved within previous 2 years				
Study methodology	Controlled trial	Pre-/post-test				
Intervention: type	Manual-based bereavement group intervention	"Non-professional, time-limited, structured program of support and assistance specifically directed towards understanding and resolving the stresses unique to bereavement by suicide."				
Intervention: setting	ND	Community (Metropolitan Toronto Distress Centre)				
Intervention: duration/sessions	1.5h/1 week x 10 weeks	2h/1 week x 8 weeks + 4xbiweekly sessions (?h)				
Intervention: manualized?	Yes	ND				
Intervention: topics	Themes focused on children's understanding of and responses to the death of a parent or sibling, unique features of suicide, and loss of personal and environmental resources	Topics: 1) "Getting acquainted and remembering"; 2) "Understanding ourselves: Accepting and expressing feelings"; 3) "Understanding reactions to suicide"; 4) "Feelings of loss: Stress and coping"; 5) "Facts of loss: Role changes"; 6) "Reliving and family renewal"; 7) "Support systems: Recognizing and using them"; 8) "Summing up and going on"				
Intervention: Proposed mechanism	Theoretical models of attachment, responses to loss, and cognitive coping used in developing Tx	ND				
Subjects (n)	52 families, 75 children	53				
Subjects (age)	Children: age 6-15	Range: 15-68 (median: 40.3)				
Clinician type	Group led by master's level psychologist	Lay volunteers (n=2) "selected, trained, and supervised by [mental health] professionals"				
Control?	Tx vs. No Tx	No				
Randomization?	No	No				
Follow-up	Immediate post-intervention	t1: baseline; t2: 4-6w post-intervention				
Drop out (n, %)	Tx: 18%; No Tx: 75%; NO ITT	37.7% (n=20)				
Outcomes measured (1, 2, 3, 4, etc.)	1: Childhood Post-traumatic Stress Reaction Index; 2: Children's Depression Inventory; 3: Revised Children's Manifest Anxiety Scale; 4: Social Adjustment Inventory for children and adolescents	1: Symptom Checklist-90 (SCL-90) (somatization, OC, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism, global symptom index); 2: Satisfaction (goals met, format)				
Effect1	1: No sig diffs	1: no stats				
Effect2	2: Tx group had significantly lower outcome depression vs. No Tx.	2: no stats				
Effect3	3: Tx group had significantly lower outcome anxiety vs. No Tx.					
Effect4	4: No sig diffs					

vided a one-time outreach to survivors at the scene of a suicide.12 Duration of follow-up for the studies ranged from immediately post-intervention<sup>8,13,15,22</sup> to 12 months after the intervention.<sup>7</sup>

Outcomes measured in evaluations of family-focused suicide postvention programs included attendance, 12,22 and satisfaction; 22 measures of mental health including depression (Beck Depression Inventory<sup>7,8</sup> and Children's Depression Inventory<sup>13</sup> as well as selfreported depression "feelings" 15), anxiety (Children's Manifest Anxiety Scale, 13 self-reported anxiety "feelings" 15), Brief Symptom Inventory (somatization, obsessive compulsive features, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism),7,8,15 (Global Severity Index only9), posttraumatic stress symptoms (Traumatic Experiences Scale,9 and Childhood Post-traumatic Stress Reaction Index<sup>13</sup>) and suicidal ideation;<sup>12,15</sup> as well as measures of social adjustment;7-9,13 grief (Grief Experience Inventory,7-9 grief "feelings"15); and physical health (appetite, exercise, sleep, concentration)<sup>12</sup> and health status/Health Behaviours Scale<sup>9</sup>).

#### Quality of Evidence

Quality of evidence of evaluations of family-focused suicide postvention programs ranged from very low (case report including expert opinion with some critical appraisal)22 to moderate (pre-/ post-test with control group; single pre-/post-test with multiple follow-ups; low quality RCT)7,8,12,13,15,19 to high (RCT).9

#### Evidence of Effectiveness

Results reported in evaluations of family-focused suicide postvention programs include short- (immediate)8,13 and long-term (12 months) improvements in depression symptoms, 7 short-8,13 and long-term reduction in anxiety symptoms;7 short-8 and long-term reduction<sup>7</sup> in other psychological symptoms (see Table 3c); shortterm (immediate) reduction in mental distress;9 short-8 and longterm (6 months9 and 12 months7) improvement in grief experiences; and satisfaction with help derived from participation in support group. 15,19,22

Outreach at the scene of suicide was found to be significantly more likely to result in incidence and frequency of attendance at a support group as well as help-seeking at a crisis centre for suicide survivors<sup>12</sup> compared to no contact.

Both intensive (bereavement support group) and minimal contact (social group) nursing postvention for spousal survivors of suicide resulted in significant reduction in depression symptoms, obsessivecompulsive traits, anxiety and phobic anxiety, grief experiences (despair, anger/hostility, guilt, rumination, depersonalization) immediately after intervention, with significant improvement on social adjustment present only after the minimal contact intervention.8 Effects of the interventions (collapsed for follow-up analysis) on depression symptoms, anxiety, phobic anxiety, paranoid ideation, psychoticism, grief experiences (despair, loss of control, rumination,

Table 1c. Characteristics of Evaluations of Community-based Suicide Postvention Programs

Author Year	Etzersdorfer & Sonneck 1998	Hacker et al. 2008				
Title	Preventing suicide by influencing mass-media reporting. The Viennese experience 1980-1996	Coping with youth suicide and overdose: One community's efforts to investigate, and prevent suicide contagion				
Source database	Ref from Pirkis, 2006	PubMed				
Target population	Media	Community				
Study methodology	Prospective field experiment	Field experiment				
Intervention: type	Suicide reporting guidelines	Community-wide intervention based on CDC recommendations for containment of suicide contagion: Support services, youth development, media approaches, education				
Intervention: setting	Vienna, Austria	Sommerville, MA (pop.77,478)				
Intervention: duration/sessions	Development of media guidelines and media information campaign (mid 1987, duration not reported)	2 years (2003-2005)				
Intervention: manualized?	NA	No				
Intervention: topics	Responsible reporting of suicide and suicide attempts	Trauma response network, candle-light vigils, substance abuse "speak-out", trainings on signs and symptoms of SA, linking of individuals with SA with resources, "crisis counseling" (students and parents), expansion of school-based mental health services, dedicated beds in local hospital, provision of services to survivors by community mental health agency, youth development (youth worker network, recreation programs, after-school-activities), education of local media on CDC reporting guidelines, newspaper section dedicated to youth and families, publication of prevention articles around significant dates, creation of video on local cable channel, gatekeeper training				
Intervention: Proposed mechanism	Reduce trigger-effect, reduce attention, reduce effect	Community response				
Subjects (n)	NA	Youth				
Subjects (age)	NA	Range: 10-24 years				
Clinician type	NA	NA				
Control?	No	NA				
Randomization?	No	NA				
Follow-up	1980-1996	1994-2007				
Drop out (n, %)	NA	NA				
Outcomes measured (1, 2, 3, 4, etc.)	1: Number of subway suicides; 2: Number of subway suicide attempts	1: Number of suicide deaths; 2: Number of lethal overdoses				
Effect1	1: No statistical analysis reported, but drop visually "sharp"	1: No statistical analysis reported				
Effect2	2: No statistical analysis reported, but drop visually "sharp"	2: No statistical analysis reported				

Table 2. Levels of Evidence of Suicide Postvention Evaluations (Centre for Evidence Based Medicine)

	Author	Year	Level	Type of Study
School-based	Callahan	1996	5	Expert opinion
	Grossman et al.	1995	4	Single group pre-/post-test
	Hazell & Lewin	1993	3b	Pre-/Post-test with control group
	Mackesy-Amiti et al.	1996	4	Single group pre-/post-test
	Poijula ét al.	2001	5	Expert opinion
	Sandor et al.	1994	4	Single group pre-/post-test
Family-focused	Battle	1984	5	Expert opinion
,	Cerel & Campbell	2008	3b	Pre-/Post-test with control group
	Constantino & Bricker	1996	2b	Low-quality RCT
	Constantino et al.	2001	3b	Single group pre-/post-test with multiple follow-ups
	Farberow	1992	3b	Pre-/Post-test with control group
	Murphy et al.	1998	1b	RCT
	Pfeffer et al.	2002	3b	Pre-/Post-test with control group
	Rogers et al.	1982	4	Single group pre-/post-test
Community-based	Etzersdorfer & Sonneck	1998	2c(-)	Ecological study (no critical appraisal)
,	Hacker et al.	2008	2c(-)	Ecological studý (no critical appraisal)

depersonalization, somatization, death anxiety), and most social adjustment scale subsets were sustained after one-year follow-up.<sup>7</sup>

Mothers bereaved by the violent death of their children and participating in a group treatment had significant immediate improvement in measures of overall mental distress and post-traumatic stress disorder (PTSD) compared to control that was not sustained at six months follow-up, and improvements in grief experiences scale first evident at follow-up.9 Participating fathers had significantly lower overall mental distress scores compared to control sustained at six

months follow-up; however there was no program effect on fathers' PTSD scores or grief responses. No program effect on participants' physical health status or marital role strain was observed.

Children and adolescents participating in a group intervention for bereavement through suicide of a relative had significantly lower scores on depression and anxiety scales compared to the control group immediately after the intervention.<sup>13</sup> However, no program effect on post-traumatic stress reactions or social adjustment was observed.

Year No known harmful side effects effects	nan 1996 N Harmful N effects reported	man 1995 N ND N	18 1993 N ND N	esy- 1996 N ND N et al.	a 2001 N ND N	or 1994 N ND N	N = No Y = Yes SI = suicidal ideation SA = suicide attempt
Large sample  Large sumple	Y for SI, No N for SA	Y for Y know- ledge, satisfac- tion	z	Y (for Y know- ledge)	> Z	> Z	e attempt
described Independent evaluation	o detail N	Z	z	z	Z	Z	ND = No SB = suici
edequate omcostuo seruseem	SI, SA	Y (see above), but No direct outcomes for student suicidal behaviour	>-	Y but No outcomes for effect on student SB	Y, however unclear parameters of Tx time vs. follow-up time	N outcomes relating to students' coping/ mental health	ND = Not described SB = suicidal behaviour
Differences described Modest attrition (≤20%)	No statistical NA analysis	Y N (-33% (pre-/post-) at post)	Y (vs. control)	Y (pre-/post-)	No statistical NA analysis	<b>≻</b>	NA = Not applicable FTT = first-talk through
Intent-to- treat analysis	Z Z	₹ Z	z	z	∢ Z	Z	(progran
escurate interpretatio siluser fo n	<b>∀</b> Z	Overstatement of results "The utilization of such an eclectic and pragmatic approach should add to the current literature on effective suicide prevention"	>	Y (appropriate discussion of limitations)	Overstatement of results, "An appropriate interventior FTT and PD by a trained MH professional seemed to be a factor in inhibiting new suicides."	Y (appropriate discussion of limitations)	NA = Not applicable
Statistically significant partitive effect	z	>-	No difference N in outcomes	Z >-	<b>Y</b>	Y but Cx had ne exposure NOR 'difficult to attrik to program	
sustained tor S 1 yr post- program S 1 external replication	Z	Z	Z	z	Z	ither N Fx, oute	Tx = Treatment group MH = mental health
(RCT) Quality Rating	Insufficient	Insufficient	Insufficient	Insufficient	Insufficient—> Inconclusive	z	dnc 4:
	RCT  No known harmful side effects  Random assignment Large sample Large sample described described attrition (\$20%)  Differences described attrition (\$20%)  Modest analysis described intent-to-treat analysis significant interpretation to or tesults feet interpretation on of results feet feet interpretation in of results feet effect such or or tesults feet effect such or tesults feet external such or tesults feet external such its feet or tesults fee	RCT  No ketail N No statistical NA NA No statistical NA	No detail N No detail N No statistical NA NA NA NA NA Satisfact behaviour for student suicidal satisfact tion for student suicidal satisfa	nan 1996 N Harmful N for St, No detail N St, SA analysis reported N N V for St Understratement of results N N N V (see above), but Y N (-33% NA results on of such analysis reported N N N N N N N N N N N N N N N N N N N	Rective suicide prevention   1995 N ND N N N N N N N N N N N N N N N N N	Registration   1995   No detail of results   No defect outcomes   No statistical NA   No statistical NA   No statistical NA   No statistical NA   No difference N   No diffe	1996   N   N   N   N   N   N   N   N   N

One evaluation reported conflicting findings of significantly higher "feelings" of depression and puzzlement in adult participants of a group-based intervention compared to control, coupled with a reduction in severity of grief, shame and guilt "feelings" from baseline to post-intervention among participants.15

# Community-based suicide postvention programs

Two evaluations of community-based suicide postvention programs were identified in the literature. One study reported the effects of media guidelines and information campaigns for the containment of suicide contagion on the number of deaths by suicide in the Viennese subway (>1 million population) between 1980 (seven years before the intervention) and 1996.11 The other described the results of a two-year community intervention for the containment of suicide contagion among young people in a mid-sized town in Maine (<80,000 population),10 which had as one component media education on suicide reporting guidelines, but also included a variety of other activities implemented in schools, media, and health services systems (see Table 3). Outcomes measured in the community-based suicide postvention evaluations were number of deaths by suicide, 10,11 number of lethal overdoses, 10 and number of suicide attempts. 11

# Quality of Evidence

The evaluations of community-based suicide postvention programs used ecological study designs (moderate quality of evidence). However, neither of the evaluations described statistical analysis of program effects, limiting the conclusions that can be drawn regarding effectiveness.

# Evidence of Effectiveness

The evaluation of media guidelines for responsible reporting of suicide and suicide attempts in the Viennese subway noted a "sharp drop" in such events after initiation of the intervention, with the levels seen in the four years prior to the intervention not recurring in the subsequent nine years.<sup>11</sup> However, interpretation of the effectiveness of this postvention is difficult since the report does not make clear the exact duration of the intervention and lacks a discussion of other socio-historical factors that may have influenced suicide rates at that

Unlike the report discussed above, the evaluation of a community-wide intervention to reduce youth suicide and lethal overdose noted the limitations of an ecological study design in ascribing causality to the intervention.<sup>10</sup> In addition, the very short follow-up described in this evaluation (2 years post-intervention) contributes to limiting the con-

		nt	nt	nt	sive	nt	nt	nt	nt	nt	nt	
	(RCT) Quality Rating	Insufficient	Insufficient	Insufficient	Insufficient – Inconclusive	Insufficient	Insufficient	Insufficient	Insufficient	Insufficient	Insufficient	nt group health
ج	replication	Z	Z	Z	Z	z	Z	Z	z	Z	z	Tx = Treatment group MH = mental health
newol	Effect sustained for ≥1 yr post- program	z	Z	z	<b>&gt;</b>	z	Z	z	Ϋ́	NA	Z Z	Tx = T
ository" Fran	Statistically significant positive effect	Z	z	Y for some outcomes	Y for some outcomes but groups combined after Tx so analysis Not RCT	z	Y for some	Y for some	Ϋ́Z	NA	Υ Z	o debriefing
Evidence of Effectiveness for Suicide Postvention Programs (Office of Justice Programs, "What Works Repository" Framework)	Accurate inserpretatio stluser to n	ď Z	>-	>-	<b>&gt;</b>	Y (appropriate discussion of limitations)	<b>&gt;</b>	Y (appropriate discussion of limitations)	Y (appropriate discussion of limitations)	NA	Y (appropriate discussion of limitations)	Cx = Control group gram) PD = psychological debriefing
e Prog	Intent-to- treat analysis	Z	Υ Z	A A	Z	z	z	z	₹ Z	A A	<b>∀</b> Z	gh (pro
e of Justic	Modest attrition (\$0\$2)	<b>&gt;</b> -	<b>∀</b> Z	Y (0% reported)	N (22%)	Y Z	>	N (Cx lost 75%)	N (-37% at post- test)	Y Y	<b>∢</b> Z	NA = Not applicable FTT = first-talk through (program)
ırams (Offic	S Differences described	Z	γ (pre-/post-)	>-	>-	>-	Few details	>-	>-	No statistical NA analysis	No statistical analysis	NA = Not FTT = first
e Postvention Prog	Adequate omotivo sasuzeam casuzeam	N (see above)	Y (see above), No outcomes relating to survivor's coping/own mental health	>-	<b>&gt;</b>	N (many comparisons with very small samples)	>-	>-	No statistical analysis	<b>*</b>	>-	ND = Not described SB = suicidal behaviour
Suicid	independent evaluation		z	Z	z		z	z	z	z	z	ND = I SB = SI
eness for	Intervention described	No detail	>-	>-	<b>&gt;</b>	No detail	No detail	>-	Few details	>-	>	
of Effectiv	eldmes semple	Z	>-	z	z	z	Y (for outcome measures used)	z	Z	Y Y	>	Y = Yes SA = suicide attempt
ence (	Random Asignment	red Led	z	>	>	z	>-	Z	z	NA	z	Y = Yes SA = suici
Evid	No known harmful side effects	*3 partici-   pants committed suicide	Ω	Ω	O Z	Ω	Q	NΩ	Ω	ND	ΩZ	Y = SA
ed	RCT		Z	>	>	Z	>	Z	Z	Z	Z	
ntinu	Дечь	- 984 - 484	2008	1996	2001	1992	1998	2002	1982	r 1998 k	2008	ation
Table 3. continued	Author:	батпе	Cerel & Campbell	Constantino 1996 & Bricker	Constantino 2001 et al.	Farberow 1992	Murphy et al.	Pfeffer et al.	Rogers et al.	Etzersdorfer 1998 & Sonneck	Suicide Postve et ac al al.	= No = suicidal ideation
E				noitne	sed Suicide Postve	uooî-ylim	Far			bəsse	d-ytinummoD	N   N   N   N   N   N   N   N   N   N

clusions that can be made about the effectiveness of this intervention in reducing suicide contagion. Nevertheless, while it is not possible to ascribe any program effect of the communitywide intervention to reduce youth suicide contagion, this report could be useful in informing communities that are considering or implementing such interventions about possible actions to be taken within the community, methods and protocols for partnership and collaboration, sources for data collection, and possible methods for data reporting.

# Cost-effectiveness of bereavement programs

Our analysis was unable to find any studies describing the cost-effectiveness of any program targeted at individuals bereaved by suicide. The two studies that analyzed costs, benefits, and/or cost-effectiveness of bereavement programs for other groups<sup>23,24</sup> found that costs were generally not higher than care as usual or comparable outpatient therapy, that outcomes depended on individual or group characteristics at the start of the program.

# DISCUSSION

This systematic review found that the literature does not provide support for any evidence-based suicide postvention program that reduces the incidence of suicide or suicide attempts and/or reduces suicide contagion. Furthermore, the

literature does not support sustained positive effects for schoolbased suicide postvention programs targeting youth.

Suicide postvention strategies for which promising results exist include the use of gatekeeper training to improve knowledge of crisis intervention among school personnel, with positive effects of gatekeeper training of other groups on depression and suicide rates lending further support to this strategy.<sup>25</sup> Two family-based strategies also appeared promising. Provision of outreach at the time of suicide to family member survivors resulted in increased use of services designed to assist in the grieving process (compared to no outreach), and bereavement support group interventions conducted by trained facilitators resulted in some positive short-term reduction in emotional distress. This area requires further study, however, since effects differed among individuals and survivor populations, and there was a suggestion that support group interventions may have different impacts based on gender (mothers vs. fathers) and severity of distress. While there is insufficient evidence to support the use of media reporting guidelines for suicide and suicide attempt in this study, their use has been endorsed by numerous bodies including the US Centers for Disease Control,26 Canadian Psychiatric Association,<sup>27</sup> and UK Samaritans organization<sup>28</sup> to prevent against the well-documented Werther effect (suicide contagion).29

Our analysis was unable to find any studies describing the costeffectiveness of support programs targeted at individuals bereaved by suicide. The few studies that discussed cost-effectiveness of bereavement programs for other groups found that costs were generally not higher than care as usual or comparable outpatient therapy, but that outcomes depended on individual or group characteristics at the start of the program. Thus, we are not able in this report to make any comment about this important domain, but instead note that this is a fundamental gap in the evidence base that requires research.

It is well recognized that policies, programs and practices that are based on the most substantive evidence are preferable to those based on lower-quality evidence, little evidence or no evidence at all. It is also becoming increasingly recognized that "best evidence" or "best practices" frameworks may not provide optimal direction for policy-makers, program developers or practitioners because the quality of evidence used to determine such a designation is not necessarily evaluated. Overall, quality of evidence for suicide postvention programs examined in this systematic review was low, with most studies presenting expert opinion (n=3), or single group pre-/post-test without control groups (n=4). In cases such as this, the most substantive and appropriate evidence available should be used and policies, programs and practices based on this should be implemented in such a way as to be independently evaluated to help determine the effectiveness, safety and cost-effectiveness of what is being done. Furthermore, the recognition of such information gaps can be used to inform research priorities so that the necessary evidence can be obtained.

#### **LIMITATIONS**

The quality of existing research is generally low; much of what is available in the suicide postvention literature is descriptive or theoretical. Evaluation studies when they have been conducted are generally of weak design, apply weak methodologies and/or provide inadequate statistical analysis. Without the appropriate evaluation, one cannot argue for the effectiveness, safety or costeffectiveness of any intervention.

A further concern is that in many of the studies reported, there was no attempt to address the bias of the researchers themselves. Studies that demonstrated potentially positive results were often conducted by individuals or groups who either had created the intervention under study or were closely related to those who had created it. This lack of systematic independent assessment of interventions poses a considerable problem for the entire field of suicide postvention research.

#### **CONCLUSION AND RECOMMENDATIONS**

As a result of this systematic review, a number of recommendations were drafted to provide guidance to policy-makers, administrators, clinicians and researchers: 1) implementation of any postvention program in the community should be accompanied by a methodologically sound evaluation conducted by an independent party that measures program effectiveness on prevention or treatment of grief symptoms, mental distress, mental disorder, and prevention of suicide attempt and/or suicide; 2) replication of studies investigating gatekeeper training for school personnel in the area of crisis intervention and identification, guidance and referral of at-risk students is necessary to elucidate the effectiveness of this strategy on suicide prevention; 3) promising results for outreach to family and friends after a suicide ("active postvention") indicate that this intervention should be further investigated for its potential effectiveness in improving accessibility to resources and enhancing help-seeking for individuals bereaved by suicide; and 4) results of studies of group-based counseling suicide postvention programs for certain survivor groups suggest that these should be made available to those individuals who indicate a need for them (e.g., individuals experiencing more severe or prolonged mental distress or psychological symptoms), with future study required to determine the optimal setting, activities and components necessary for effectiveness of these interventions.

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# **RÉSUMÉ**

**Objectifs :** Cette étude visait à : 1) déterminer l'efficacité des programmes de « postvention » du suicide sur les tentatives de suicide et sur le suicide ainsi que sur les symptômes de tristesse, la détresse mentale et la santé mentale en général; et 2) examiner leur rapport coûtefficacité.

Méthode: En septembre 2009, nous avons interrogé des bases de données informatisées (PubMed, PsycINFO, Cinahl, base de données Cochrane, Crisis, Suicide and Life-Threatening Behavior) pour trouver des évaluations de programmes de prévention du suicide, et en février 2010, nous avons fait d'autres recherches (dans la base de données du Centre for Reviews and Dissemination, la base de données des examens systématiques du groupe Cochrane, PubMed, PsycINFO et Cinahl) pour trouver des analyses coût-efficacité de programmes de deuil. Nous avons aussi cherché manuellement des revues de la littérature et des articles pertinents. Ont été inclues dans notre analyse les publications qui décrivaient l'évaluation ou l'analyse coût-efficacité d'un programme de postvention du suicide, qui fournissaient des données et qui avaient été publiées dans des revues de langue anglaise avec comité de lecture. Nous n'avons pas tenu compte de leur date de publication. Nous avons exclu les examens systématiques descriptifs, les thèses de doctorat et les études qui décrivaient un programme de postvention sans en faire l'évaluation. N'ayant trouvé que très peu d'analyses coût-efficacité, nous avons aussi inclus les articles décrivant les « coûts » des programmes de deuil. Nous avons évalué la qualité de ces études à l'aide de la hiérarchie des preuves du CEBM (Centre for Evidence-Based Medicine), et l'efficacité des programmes à l'aide du cadre d'analyse « What Works Repository » de I'OJP (Office of Justice Programs).

**Résultats**: Sur les 49 études de programmes de postvention du suicide récupérées, 16 répondaient à nos critères d'inclusion pour l'évaluation de la qualité et des preuves d'efficacité. Nous avons défini trois populations cibles pour les programmes de postvention : l'école, la famille et la communauté. D'après les études disponibles, les programmes de postvention n'ont aucun effet protecteur sur le nombre de décès par suicide ou de tentatives de suicide, et les programmes de postvention en milieu scolaire ont peu d'effets positifs. Une étude fait même état des effets néfastes d'une initiative de postvention du suicide. La formation sentinelle, comme mesure de postvention proactive, est efficace pour accroître les connaissances sur l'intervention de crise parmi le personnel enseignant. L'accompagnement de proximité sur les lieux du suicide est utile pour inciter les survivants à participer à un groupe d'entraide dans un centre d'écoute et à trouver de l'aide pour composer avec leur perte. Le contact avec un service de counseling postvention aide en général à atténuer la détresse psychologique de la famille du défunt (conjoint, parents, enfants) dans l'immédiat. Nous n'avons trouvé aucune analyse statistique de programmes communautaires de postvention du suicide; cependant, les organismes de santé mentale de nombreux pays ont adopté les lignes directrices des médias pour parler des suicides et des tentatives de suicide. Nous n'avons trouvé aucune analyse du rapport coût-efficacité de programmes de postvention du suicide.

Conclusion : Nous présentons des recommandations pour encadrer la démarche des responsables des politiques, des administrateurs et des cliniciens, et nous proposons des pistes de recherche.

Mots clés : deuil (perte); prévention tertiaire; évaluation de programme; coûts et analyse des coûts; revue de la littérature

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