Cognitive behaviour therapy to prevent complicated grief among relatives and spouses bereaved by suicide: cluster randomised controlled trial

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ABSTRACT

Objective To examine the effectiveness of a family based grief counselling programme to prevent complicated grief among first degree relatives and spouses of someone who had committed suicide.

Design Cluster randomised controlled trial with follow-up at 13 months after the suicide.

Setting General practices in the Netherlands.

Participants 122 first degree relatives and spouses of 70 people who committed suicide; 39 families (68 participants) were allocated to intervention, 31 families (54 participants) to control.

Intervention A family based, cognitive behaviour counselling programme of four sessions with a trained psychiatric nurse counsellor between three to six months after the suicide. Control participants received usual care.

Main outcome measures Self report complicated grief. Secondary outcomes were the presence of maladaptive grief reactions, depression, suicidal ideation, and perceptions of being to blame for the suicide.

Results The intervention was not associated with a reduction in complicated grief (mean difference −0.61, 95% confidence interval −6.05 to 4.83; P=0.82). Secondary outcomes were not affected either. When adjusted for baseline inequalities, the intervention reduced the risk of perceptions of being to blame (odds ratio 0.18, 0.05 to 0.67; P=0.01) and maladaptive grief reactions (0.39, 0.15 to 1.01; P=0.06).

Conclusions A cognitive behaviour grief counselling programme for families bereaved by suicide did not reduce the risk of complicated grief or suicidal ideation or the level of depression. The programme may help to prevent maladaptive grief reactions and perceptions of blame among first degree relatives and spouses.

Trial registration Current Controlled Trials ISRCTN66473618.

INTRODUCTION

Bereavement is associated with subsequent psychiatric morbidity. An estimated 6-15% of all bereaved people develop complicated grief[1] initiated by the death of someone close to them. Complicated grief is characterised by symptoms such as avoidance of reminders of the dead person, purposelessness, subjective sense of detachment, yearning, disbelief, and bitterness related to the death. Symptoms last for at least two months and cause considerable impairment in social, occupational, or other important areas of functioning.[2] Complicated grief is associated with long term dysfunction[3] and suicidal ideation.[4 5]

People who are bereaved by suicide are even more vulnerable to psychiatric effects.[6 7] The benefits of interventions to prevent a poor outcome of bereavement are controversial but have been shown in individuals[1] and family systems[8] at risk of adverse health consequences after a loss. Previous studies, however, have had problems such as failure in random assignment to treatment groups, small sample size, failure to use outcomes specific to bereavement, low adherence, and lack of a theoretical foundation for the intervention.[9] In a randomised controlled trial, we examined the effectiveness of family based cognitive behaviour grief counselling to prevent complicated grief.

METHODS

Sample recruitment

We included first degree relatives (aged >15 years) and spouses of people who had committed suicide between 1 September 1999 and 1 January 2002 in the northern part of the Netherlands (1 685 463 inhabitants).[10] Coroners reported cases of suicide to the research team and provided data on age and sex, date of death, and name of general practitioner. We wrote to the general practitioners to ask them to mediate between bereaved families and the research team for participation. Relatives used a response form to express their willingness to participate. More information is on bmj.com and full details have been published elsewhere.[6] Participants all gave written informed consent.

Assignment

Families were randomly allocated to attend a grief counselling programme or to receive care as usual. We used randomisation lists, stratified for sex and age group (≤35, 36-65, ≥66) of the dead person, with randomly permuted blocks of 20 allocation codes to assign to either condition. The numbers were concealed from the counsellors, and an independent secretary administered the procedure. Counsellors and families were informed of the allocation outcome only after relatives completed baseline assessments.

Treatment conditions

Two experienced psychiatric nurses, with experience of a wide range of mental disorders and suicidal behaviour and familiar with dealing with suicidal behaviour, were trained in cognitive behaviour therapy. Each family was counselled by one nurse. With an interval of two to three weeks, four sessions of two hours were planned at the families' homes at three to six months after the suicide. We chose this time frame

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to intervene before negative beliefs became fixed. The counselling programme aimed to offer relatives a reference frame for their grief reactions, engage emotional processing, enhance effective interaction, and improve problem solving. Participants used a manual with information on suicide and bereavement after suicide, homework, a bibliography, and addresses for additional help. With agreement, sessions were audiotaped to monitor counselling concepts and for supervision.

Outcome measures

We carried out baseline assessments 2.5 months after the suicide to prevent high refusal rates caused by acute distress and potential response bias. We scheduled follow-up after 13 months rather than 12 months to avoid effects of the anniversary of the death on levels of symptoms.

Our primary outcome was self reported complicated grief, measured with the inventory of traumatic grief.[11] Secondary outcomes were depressive symptoms during the past week, assessed with the Center for Epidemiologic Studies depression scale (CESD).[12] We examined perceptions of being to blame for the suicide by self constructed questions: "I think I could have prevented the suicide," "I feel guilty," and "I'm wondering what I did wrong," rated on a five point Likert scale (1=totally disagree, 5=totally agree). We assessed suicidality in the previous four weeks with four questions by Paykel et al, with scores ranging from 4 to 20.[13]

At follow-up trained nurses who were not involved in the counselling sessions individually interviewed relatives were at home using the traumatic grief evaluation of response to loss (TRGR2L).[14] This is a semistructured clinical interview assessing the presence of distinctive maladaptive grief reactions based on the consensus criteria for complicated grief, such as avoidance, disbelief, bitterness, and feeling purposeless. Interviews were performed at follow-up only as we assumed that it takes some time to develop maladaptive grief reactions. Participants reported any sources of help other than the trial intervention that they used during the first year of bereavement.

Statistical analyses

Analyses of the effect of intervention were on an intention to treat basis. Regardless of the number of sessions attended and their content, we assessed the effect of grief counselling by analysis of covariance, comparing follow-up scores in the two groups, adjusted for participants' differences at baseline.[15] Full details of the analyses are on bmj.com.

RESULTS

Of all suicides that occurred in the catchment area during recruitment,[10] 69% were reported see bmj.com for flow chart). The main reason for families refusing to take part was the wish to put the event behind them, although it remained unclear to what extent this was coloured by the general practitioner's perception. People who withdrew showed a somewhat more favourable profile than those who completed the study (14.4 (SD 9.5) *v* 22.3 (12.5) (P=0.019) for mean baseline level of depression; 68.8 (16.3) *v* 76.9 (21.1) (P=0.13) for complicated grief score; 1/12 (8%) *v* 35/122 (29%) (P=0.26) blamed themselves; and 2/12 (17%) *v* 27/122 (22%) (P=0.40) had suicidal ideation).

Sample characteristics

There were no material differences between the groups except for sex of respondent, relationship to the dead person, and proportion who shared the household with the dead person (see bmj.com). In additional analyses we adjusted for these variables. Relatives in the intervention group attended between from one to seven counselling sessions (median 4; 95% confidence interval 3.7 to 4.2). In 11 families, slightly more sessions were needed to complete the programme topics.

Bereavement course

Table 1 shows the bereavement outcomes during the study. The intervention did not qualitatively affect help seeking behaviour during the first year of bereavement: 36/68 (53%) participants in the intervention group and 27/54 (50%) in the control group received primary health care, 24/68 (35%) and 17/54 (32%) received mental health care, and 33/68 (49%) and 29/54 (54%) received other kinds of help. Nobody in the intervention group and 16/54 (30%) in the control group received no help.

Counselling had no effect on complicated grief (table 2). Maladaptive grief reactions, however, were substantially less common in the intervention group and the difference was almost significant after we controlled for baseline inequalities. Counselling also had no significant effect on the level of depression or the presence of suicidal ideation. The intervention strongly reduced perceptions of being to blame, although this effect became significant only after we adjusted for baseline inequalities. The numbers needed to treat to prevent maladaptive grief reactions and perceptions of blame were 6 (4 to ∞) and 6 (5 to 16), respectively.

DISCUSSION

A family based cognitive behaviour grief counselling programme offered to first degree relatives and spouses of people who had committed suicide had no beneficial effect on complicated grief reactions, suicidal ideation, and depression 13 months after the event. We did, however, see a trend towards reduced perceptions of being to blame for the suicide and fewer

Table 1 | Unadjusted bereavement outcomes over study period according to allocation to cognitive behaviour counselling

	Baseline (2.5 months after suicide)		10.5 month follow-up (13 months after suicide)	
	Intervention*	Control†	Intervention*	Control†
Mean (SD) traumatic grief score	78.8 (21.2)	74.6 (20.9)	69.9 (23.1)	66.5 (23.8)
No (%) with maladaptive grief reactions‡	NA	NA	15 (22)	17 (32)
Mean (SD) depression score	20.6 (12.3)	24.4 (12.5)	14.2 (11.4)	13.3 (12.6)
No (%) with suicidal ideation	16 (24)	11 (20)	12 (18)	9 (17)
No (%) with perceptions of being to blame	22 (32)	13 (24)	10 (15)	12 (22)

NA=not available.
*68 participants, 39 families.
†54 participants, 31 families.
‡Assessed in 67 in intervention group and 53 in control group.

Table 2 | **Effect of cognitive behaviour grief counselling on bereavement outcome at 13 months after suicide*, adjusted for clustering of symptoms within families†**

	Differences in mean values or odds ratios‡ for binary outcomes			
	Unadjusted	P value	Adjusted§	P value
Complicated grief	−0.16 (−5.51 to 5.18)	0.95	−0.61 (−6.05 to 4.83)	0.82
Maladaptive grief reactions¶	0.44 (0.18 to 1.12)	0.09	0.39 (0.15 to 1.01)	0.056
Depression	3.09 (−0.75 to 6.93)	0.11	1.97 (−1.65 to 5.60)	0.28
Suicidal ideation	0.95 (0.31 to 2.95)	0.93	1.08 (0.33 to 3.57)**	0.89
Perceptions of being to blame	0.32 (0.09 to 1.08)	0.07	0.18 (0.05 to 0.67)**	0.01

*Adjusted for baseline value using analysis of covariance; negative continuous values indicate a lower mean outcome value for counselling group.
†Continuous measures stated in regression coefficients, dichotomous measures in odds ratios.
‡Odds of outcome in intervention relative to odds in control group with adjustment for baseline value of outcome variable.
§Adjusted for respondents' sex (male); having lived with person who died; closeness of relationship (a priori).
¶Assessed in 67 in intervention group and 53 in control group. **Additionally adjusted for baseline depression.

maladaptive grief reactions in the intervention group than in the group allocated to care as usual. As our sample was heterogeneous, we consider these results can be generalised to various relationships and ages.

The mild beneficial effect of our counselling programme on maladaptive grief reactions and blame might be the result of reduced negative cognitions and avoidant behaviours. This might, in turn, have improved family problem solving, as previously found by Kissane et al in a study among naturally bereaved families.[8] Further, our programme may have prevented feelings of guilt and unfavourable perceptions concerning the index suicide.

Having a chance in counselling to reflect on and acknowledge their loved one's difficulties before the suicide may have helped relatives to realise that they did nothing wrong. Informing relatives of the psychiatric context of suicidal behaviour might have challenged their perceptions of guilt and self blame. Thus, this counselling programme can help to relieve the burdens associated with bereavement after suicide.[16 17] Yet the risk of complicated grief was not reduced, despite the belief that negative cognitions are critical to its maintenance.[18] The intervention might counteract some of the adverse effects of suicide on the process of bereavement: 32% of relatives in the control group and 22% in the intervention group had maladaptive grief reactions at follow-up (see table 2). This proportion is remarkably close to a 20% prevalence of complicated grief at 13 months in naturally bereaved people.[3] Our intervention may therefore reduce the level of grief to that seen among naturally bereaved people.

One potential limitation is the considerable number of families that refused to take part. Efforts to recruit families could not depend on the severity of symptoms as this was unknown before inclusion. Additionally, monitored audiotapes did not suggest selection bias with regard to family functioning.[8]

The notion that grief counselling is more effective for people at high risk could be examined by studies large enough to allow analysis of subgroups according to risk.[19] Subsequent research could examine whether prevention of negative beliefs results in improved family functioning and explore the mechanisms responsible for the maintenance of complicated grief.[18]

WHAT IS ALREADY KNOWN ON THIS TOPIC

Relatives of people who killed themselves may have particularly difficult grief reactions and need specific help

Cognitive behaviour therapy is useful for the treatment of complicated grief

WHAT THIS STUDY ADDS

A family based cognitive behaviour grief counselling programme, offered to close relatives and spouses of people who killed themselves, did not prevent complicated grief reactions 13 months after the event

The intervention reduced maladaptive grief reactions and perceptions of being to blame

The results extend over a wide range of relatives' ages and relationships to the dead person

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