Crisis card following self-harm: 12-month follow-up of a randomised controlled trial

JONATHAN EVANS, MARK EVANS, H. GETHIN MORGAN, ALAN HAYWARD and DAVID GUNNELL

Summary No intervention has been shown to be effective in preventing repetition of self-harm. In the 6-month follow-up of a large randomised controlled trial, we previously reported no effectiveness of the provision of a card offering 24-h crisis telephone consultation on repetition of self-harm. However, there was a possible benefit among those presenting following a first episode (OR=0.64, 95% CI 0.34–1.22). Here we report the 12-month follow-up of the trial. The results confirm no overall benefit of the intervention (OR=1.19, 95% CI 0.85–1.67). Among those with a first episode of self-harm, the possible benefit of the intervention had diminished (OR=0.89, 95% CI 0.52–1.52), although a modest effect cannot be excluded.

Declaration of interest None.

Preventing repetition of self-harm has been the focus of a number of studies. Psychological and social interventions have mostly been evaluated but none has been clearly effective in reducing repetition (Hawton *et al*, 1998). Many trials have been too small to identify clinically important effects. The three largest trials to date have involved manual-assisted cognitive therapy for those with a previous history of self-harm (Tyrer *et al*, 2003), a primary care guideline-based intervention (Bennewith *et al*, 2002) and the provision of a crisis card allowing telephone consultation as an alternative to self-harm (Evans *et al*, 1999). Neither manual-assisted cognitive therapy nor the primary care guideline intervention had any effect on reducing repetition of self-harm at 1 year. The study of crisis card provision has only reported the 6-month outcome. At this time there was no overall effect of the crisis card in preventing repetition of self-harm but there was an indication of benefit for those with no previous history of self-harm (odds ratio (OR) compared with usual treatment 0.64, 95% confidence interval (CI) 0.34–1.22).

We report the results of the 12-month follow-up of the crisis card study. This allows direct comparison with other studies reporting 12-month repetition rates and further investigation of the potential benefit of this intervention for those who have no previous history of self-harm.

METHOD

The study recruited 827 patients admitted to hospital following self-harm between November 1994 and July 1996. Patients were randomised after standard treatment was planned to also receive a card offering 24-h crisis telephone consultation with an on-call psychiatrist for up to 6 months after the index episode. Those in the standard treatment group received no information on the crisis card. Standard treatment varied according to the judgement of the assessing clinician and included advice only, referral to the community mental health team or psychiatric hospital admission. The trial is described in detail elsewhere (Evans *et al*, 1999). The primary outcome was repeated self-harm within 6 months of the index episode. We investigated 12-month repetition rates to determine whether the suggested beneficial effects of emergency card provision for those with first episodes of self-harm are sustained over longer periods.

We identified repetition of self-harm by means of a self-harm case register (Evans *et al*, 1996). We used logistic regression in Stata version 8.0 for Windows to calculate odds ratios for repetition comparing control and intervention groups. We investigated whether the effect of the intervention differed between people with and without a previous history of self-harm by fitting an interaction term (treatment × past history) to our model and investigating the overall treatment effect. We compared time to episode of repeat self-harm between those receiving standard care and those with a crisis card using the log-rank test.

RESULTS

We recruited 827 patients, representing 64% of those admitted to general hospital following self-harm during the study period; 417 were given a crisis card and 410 received standard treatment (Evans *et al*, 1999).

Main analysis

There were 167 individuals (20.2%) with repeat episodes of self-harm in the 12 months after the index episode. Of participants carrying a crisis card, 90 (21.6%) had a repeat episode of self-harm within 1 year compared with 77 (18.8%) in the control group (OR=1.19, 95% CI 0.85–1.67). Time to repetition did not differ between the control and intervention groups (log-rank test χ^2=0.98, P=0.32). The Kaplan–Meier curve is shown in Fig. 1.

Subgroup analysis

There was no strong evidence that the effect of the crisis card differed between those with the single index episode and those with a past history of self-harm (likelihood ratio χ^2=2.37, P=0.12). Of the subjects in the intervention group with the single index episode, 30 (13.6%) had a repeat episode of self-harm within 1 year compared with 31 (15%) in the control group (OR=0.89, 95% CI 0.52–1.52). Of the individuals in the intervention group with a previous history of self-harm, 60 (30.9%) had repeat episodes of self-harm within 1 year compared with 45 (22.5%) in the control group (OR=1.54, 95% CI 0.98–2.42).

During the first 6 months following the provision of the card, 70 individuals made telephone contact; the majority only once; the maximum number of contacts was 16. We have no data on subjects trying to make contact but failing to get past the hospital switchboard. There was no report of such difficulties. Of patients in the intervention group, those making telephone contact were more likely to have repeat episodes of self-harm (OR=4.91, 95% CI 2.83–8.50).

DISCUSSION

These data confirm that there is no benefit in issuing a crisis card allowing telephone consultation to all those presenting to hospital after self-harm. There was no effect on the number of repeat episodes at 12 months and no difference between those with and without a previous history of self-harm. The possible benefit for those with a single past episode of self-harm (Evans *et al*, 1999) was not found at 12-month follow-up. It is important to note that while not significant, the 95% confidence interval for repetition among those with a previous history of self-harm includes a 142% increase. We can be confident that the crisis card is unlikely to be beneficial for this group.

A number of issues need consideration. We defined repetition by hospital attendance following self-harm. It is known that self-reported repetition rates are higher than those identified solely through hospital attendance (Guthrie *et al*, 2001). It is unlikely that this differed between intervention and control groups. Although this study was large, it was not large enough to exclude a clinically important effect in those presenting following a first episode. The 95% confidence intervals around the estimated effect of the intervention following a first episode included a 48% reduction and a 52% increase in repetition. As this intervention is likely to be much cheaper than manual-assisted cognitive therapy, a small beneficial effect may still be cost-effective.

JONATHAN EVANS, MRCPsych, Division of Psychiatry, University of Bristol; MARK EVANS, MRCPsych, Department of Psychotherapy, Gaskell House, Manchester; H. GETHIN MORGAN, FRCPsych, University of Bristol, Cotham House, Bristol; ALAN HAYWARD, MSc, Cedar House, Blackberry Hill Hospital, Bristol; DAVID GUNNELL, PhD, Department of Social Medicine, University of Bristol, Canynge Hall, Bristol, UK

Correspondence: Dr J. Evans, Consultant Senior Lecturer, Division of Psychiatry, University of Bristol, Cotham House, Cotham Hill, Bristol BS6 6JL, UK. Tel: +44 (0)117 9546635; fax: +44 (0)117 9546672; e-mail: j.evans@bristol.ac.uk

(First received 15 June 2004, final revision 19 October 2004, accepted 21 October 2004)

This study was based on services running nearly 10 years ago. There have been major changes in mental health service provision in the UK in recent years (Department of Health, 1999). It is noteworthy that those who made contact were at greater risk of repetition, possibly because they had suicidal ideas. An alternative explanation is that the telephone contact evoked feelings of rejection thereby increasing risk. More skilled handling of those in crisis may be necessary. Crisis teams are now widely available and staffed 24 h a day. These teams include staff with specific training or experience in crisis management. It is possible that contact with crisis teams might prevent repeated self-harm more effectively than contact with on-call junior doctors as offered in this study. The context in which the card is provided is important. We did not have any information about how many subjects kept the card or whether they thought it might be useful. The card is more likely to be effective if the recipient is confident they can use it. Often specialist teams assess those presenting with an episode of self-harm; this includes crisis teams in some areas. Such teams might encourage greater confidence in the card as an alternative to self-harm.

Before conducting further trials of sufficient size, qualitative research should be undertaken to investigate whether this intervention might benefit those presenting following a first episode. This could help to refine the intervention to utilise some of the potentially beneficial changes in mental health service provision in the UK since the planning of this original trial.

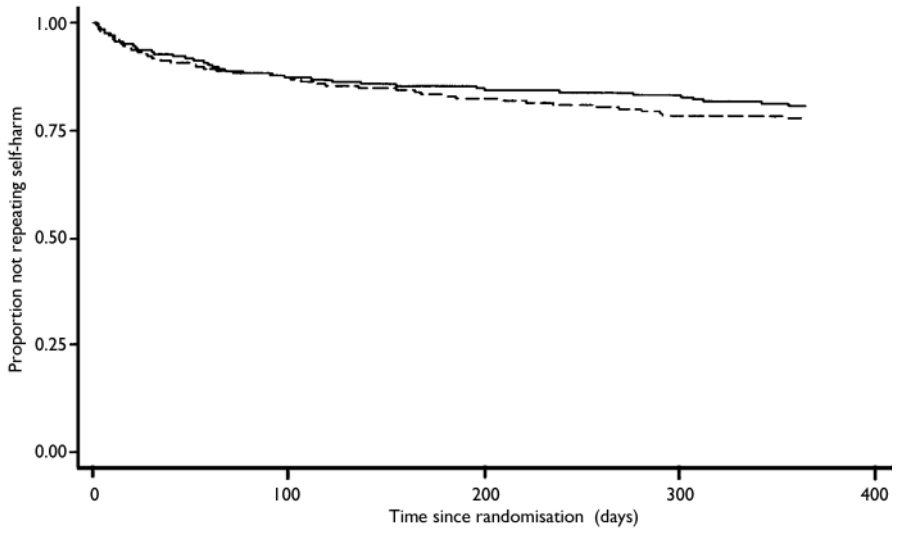

Fig. 1 Kaplan–Meier survival estimate: days to repetition of self-harm; ——, treatment as usual; - - - -, crisis card.

ACKNOWLEDGEMENTS

We thank Gemma McCann for updating the self-harm register and Muriel Cole for preparing the manuscript.

REFERENCES

Bennewith, O., Stocks, N., Gunnell, D., *et al* (2002) General practice based intervention to prevent repeat episodes of deliberate self-harm: cluster randomised controlled trial. *BMJ*, **324**, 1254–1257.

Department of Health (1999) *A National Service Framework for Mental Health*. London: Department of Health.

Evans, J., Johnson, C., Stanton, R., *et al* (1996) How to establish case registers: II. Non-fatal deliberate self-harm. *Psychiatric Bulletin*, **20**, 403–405.

Evans, M. O., Morgan, H. G., Hayward, A., *et al* (1999) Crisis telephone consultation for deliberate self-harm patients: effects on repetition. *British Journal of Psychiatry*, **175**, 23–27.

Guthrie, E., Kapur, N., Mackway-Jones, K., *et al* (2001) Randomised controlled trial of brief psychological intervention after deliberate self poisoning. *BMJ*, **323**, 135–138.

Hawton, K., Arensman, E., Townsend, E., *et al* (1998) Deliberate self harm: systematic review of efficacy of psychosocial and pharmacological treatments in preventing repetition. *BMJ*, **317**, 441–447.

Tyrer, P., Thompson, S., Schmidt, U., *et al* (2003) Randomized controlled trial of brief cognitive behaviour therapy versus treatment as usual in recurrent deliberate self-harm: the POPMACT study. *Psychological Medicine*, **33**, 969–976.