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Editorial

Postcards, green cards and telephone calls: therapeutic contact with individuals following self-harm

Navneet Kapur, Jayne Cooper, Olive Bennewith, David Gunnell and Keith Hawton

Summary

Self-harm is a major public health problem and universal interventions such as contacting individuals by post or telephone following a self-harm episode have received much attention recently. They may also appeal to service providers because of their low cost. However, a widespread introduction of these interventions cannot be justified without a better understanding of whether they work, and if so how.

Declaration of interest

N.K. is the Chair of the Guideline Development Group for the forthcoming National Institute for Health and Clinical Excellence (NICE) guideline on the longer-term management of self-harm. The views expressed in this editorial are those of the authors and do not necessarily reflect the views of the self-harm Guideline Development Group or NICE. All authors have been involved in studies testing a variety of interventions for self-harm. They are currently involved in a National Institute of Health Research Programme grant, one component of which aims to develop contact interventions following self-harm and psychiatric discharge.

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Self- harm imposes a significant burden on health services[1] and its importance as a risk factor for suicide is widely acknowledged.[2] The economic consequences of suicidal behaviour are considerable[1] and it is a major contributor to premature mortality.[3] Despite this, evidence to guide intervention is lacking. Service providers may find individuals who harm themselves difficult to treat.[1] In this context it is easy to see the attraction of low-cost universal interventions, for example sending postcards expressing concern following an episode of self-poisoning[4] or telephone contact.[5] However, before such approaches are considered for introduction into routine healthcare we need to assess their potential effectiveness.

Letters and postcards

A study carried out in the 1970s in San Francisco recruited people who had been admitted to a psychiatric hospital because of depressive symptoms or suicidal ideas.[6] Those who refused ongoing care following discharge (over 800 individuals) were randomised to receive either a series of short letters over a 5-year period or to no contact. The individualised letters expressed general concern about the person's welfare since discharge. Information from official sources and from family members was used to determine whether individuals subsequently died by suicide. Provision of letters was associated with a lower risk of suicide in the first 2 years of the study (proportion of individuals dying by suicide under 2% in the contact group compared with over 3% in the no contact group ($P = 0.043$)) although the effect diminished over the 15-year follow-up period.

A variant of this intervention was used in a more recent Australian trial of individuals who had poisoned themselves.[4,7] Participants were randomised to receive either a series of postcards over 12 months (in addition to usual treatment) or to usual treatment alone. The postcards included a simple message of concern. The proportion of individuals repeating self-poisoning and presenting to hospital was not different in the two groups: intervention 15% (95% CI 11.5–18.7) *v.* control 17% (95% CI 13.5–21.0), but the number of repetitions in the intervention group was half that in the usual treatment group (101 *v.* 192, incidence risk ratio (1RR) = 0.55, 95% CI 0.35–0.87). These treatment effects were maintained at 2-year follow-up. However, the between-group differences were largely accounted for by a small number of women in the control group with a past history of self-harm ($n = 18$, less than 3% of the sample).

Green cards

A different approach is the provision of emergency or crisis cards. The original green card study recruited individuals with a first episode of self-harm who had been admitted to a medical ward in Bristol, UK.[8] The card encouraged help-seeking and offered an on-demand crisis admission. There was a suggestion that provision of the card was associated with reduced repetition rate (repetition rate 4.9% *v.* 13.5% in controls; difference: 8.6%, 95% CI 1.0–15.2%). A later and much larger green card study in Bristol included both participants with and without a past history of self-harm.[9] There was no offer of admission, instead the card offered 24-hour telephone contact with the on-call psychiatrist. The proportion of individuals repeating self-harm was slightly higher in the intervention group than the control group (odds ratio (OR) = 1.20, 95% CI 0.82–1.75). However, a subgroup analysis found that in those without a previous history of self-harm the intervention was associated with a (non-statistically significant) reduced risk of repetition at 6 months (8% *v.* 12% for usual treatment, OR = 0.64, 95% CI 0.34–1.22), whereas for those with a past history, provision of the card appeared to be associated with an almost doubling in the risk of repetition (27% *v.* 16.5% for usual treatment OR = 1.85, 95% CI 1.14–3.03). At 1-year follow-up the differences between intervention and control groups had diminished for both those with and without a past history of

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self-harm (OR = 1.54, 95% CI 0.98–2.42 and OR = 0.89, 95% CI 0.52–1.52 respectively).[10]

Telephone calls

A French study of individuals who had poisoned themselves used a one-off telephone-based intervention and a randomised three-armed design.[5] Participants received either telephone contact at 1 month, telephone contact at 3 months, or no telephone contact. Experienced psychiatrists (who had not previously met the participants) made the calls. The psychiatrists reviewed existing treatments or suggested new ones, made urgent appointments at the emergency department if necessary, and provided 'psychological support'. There were no differences between the groups using an intention-to-treat analysis (reattempt rates at 13 months: 16% in 1-month contact group, 14% in 3-month contact group, 19% in control group, $\chi^2 = 1.97$, $P = 0.37$).

Combined approaches

A recent large World Health Organization (WHO) sponsored trial in eight hospitals in Brazil, India, Sri Lanka, Iran and China randomised nearly 2000 individuals who had made suicide attempts to 'brief intervention and contact' or treatment as usual.[11] The intervention involved provision of a structured 1-hour information session. After discharge, nine follow-up contacts were made by clinicians over 18 months either by telephone or in person. Referrals to other agencies and services were arranged as appropriate. Although the overall number of deaths was small, the risk of death by any cause was halved in the treatment group compared with those who received treatment as usual. The proportion of individuals who died by suicide was also lower in the intervention group (0.2% *v.* 2.2%, $\chi^2 = 13.8$, $P < 0.001$). The findings of this study need to be interpreted cautiously. Mortality data were obtained from informants rather than official data sources. This also meant no outcome data were available for those lost to follow-up. No data were presented on repeat attempts as an outcome. For deaths other than suicide, the death rate in the intervention group was actually double that in the control group (1% *v.* 0.5%) and this warrants further exploration.

How might contact work?

On the face of it, these interventions appear to be very simple. How is it possible that they might alter suicidal behaviour, if indeed they do? The authors of the early letter writing study speculated that regular contact might give individuals a feeling of 'social connectedness' – a sense of being joined to something meaningful outside oneself that acted as a stabilising emotional influence.[6] A quarter of participants in their study wrote positive comments about the intervention (a selection of comments are included in the Appendix). Other authors have suggested a similar mechanism for postcard and combined interventions.[4,11]

Of course an alternative way in which contacting individuals might help is through facilitating access to existing health services. Motto & Bostrom noted that a few participants (numbers not specified) used the researchers to help them re-enter the healthcare system.[6]

There is also the issue of an intervention being associated with an increased rate of repetition among individuals with a past history of self-harm in the second green card study.[9] Is it really feasible that these treatments might make some people worse? Clinically, there may be a perception among some staff that self-harm is an 'attention-seeking behaviour' and that any professional attention will just serve to exacerbate the situation. However, there is little research evidence to support this view. The authors of the green card study themselves have raised the possibility that less than optimal telephone contact may have evoked feelings of rejection and therefore increased risk.

Practical considerations

As well as possible mechanisms, a number of practical points need to be considered. Service context is likely to be an important determinant of any treatment effect. Contact interventions may well work in gold standard services. However, certainly in the UK, some individuals experience very poor care following self-harm.[1] It is unlikely that messages from services that have provided suboptimal care will have much effect, indeed it is conceivable that they could have a negative impact. Other possibilities to consider are the interaction between the intervention and usual treatment and differential effects internationally. It may be that contact interventions have a much larger effect in settings where there are few alternative sources of help than in settings where comprehensive mental health aftercare is in place. Other issues also need to be borne in mind. The content of interventions needs to be considered carefully. Who should deliver them? When should they be delivered? (probably quickly because of the pattern of repetition following self-harm).[12] How interactive should interventions be? Some contacts have been relatively personalised,[6] others have been computer generated.[4] Other forms of communication might also be effective, for example email or text messages (www.mhrn.info/index/portfolio/Studies/Suicide-and-Self-harm/txt4SHS.html).

Conclusion

Simple contact-type interventions may hold some promise in the care of individuals who have harmed themselves but clearly further work is needed to assess their effectiveness. In this issue, Beautrais and colleagues report new findings from a randomised controlled trial of a postcard intervention in New Zealand.[13] Interventions in this area of practice will be subject to further evaluation in the forthcoming National Institute for Health and Clinical Excellence guideline on the longer-term management of self-harm. How should we choose between the various options for making contact? We could seek to replicate existing work, but an alternative, given the uncertainties in this area, might be to use qualitative research methods to help to characterise and distil the active ingredients of contact following self-harm and then test the refined interventions in formal trials. We are currently engaged in an National Institute of Health Research funded programme of work that adopts the latter approach (http://cochrane.epi.bris. ac.uk/suicide-prevention/index.html).

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Appendix

Comments on a letter-writing intervention from participants in a randomised controlled trial[6]

'Thank you for your continued interest.'

'After I threw the last letter out I wished I hadn't, so I was glad to get this one.'

'I really appreciate your persistence and concern.'

'Your note gave me a warm pleasant feeling. Just knowing someone cares means a lot.'

'I was surprised to get your letter. I thought that when a patient left the hospital your concern ended there.'

'You will never know what your little notes mean to me . . . someone cares'

'You are the most persistent son of a bitch I've ever encountered so you must be really sincere in your interest in me.'

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