# The early repetition of deliberate self harm

ABSTRACT – The objective was to determine the pattern of repeated deliberate self harm (DSH) in a busy innercity teaching hospital. We undertook a retrospective cohort analytical study for all 1,576 DSH patients seen for assessment over a two-year period. Age, sex and previous DSH were noted at index episode (562 (36%) reported a previous history). Each patient was followed up for 12 months and repetition of DSH was recorded. DSH was repeated by 193 (12%) within one year, 138 (72%) once and 55 (28%) more than once. Repetition was more common and occurred much more quickly in those with a previous history than those without (relative risk: 3.4). Median time to repetition was 12 weeks but about 10% repeated within a week. The results were similar for men and women. This implies that previous history is the single most useful predictor in the repetition of DSH. Repetition occurs quickly and most rapidly in those who have previously harmed themselves. Intervention aimed at reducing repetition of self harm must be delivered within days, not weeks.

Of patients who attend hospital after an episode of self poisoning, 12–25% will take another overdose within a year. There are at least 100,000 hospital attendances a year for deliberate self harm (DSH) in England and Wales, so this early repetition rate is a major cause of morbidity. Repetition of self poisoning is important in its own right and because it is associated with future suicide<sup>1</sup>. The Health of the Nation initiative has identified suicide reduction as a key target<sup>2</sup>. A systematic review of how this reduction may be achieved concluded that there was no good evidence for the effectiveness of specific interventions<sup>3</sup>. This review did, however, identify specific high-risk groups, including those who had deliberately harmed themselves, to whom interventions could be directed.

In planning a new study, or setting standards for existing services, the timing of any intervention is likely to be important in determining its effectiveness in reducing repetition rate. Previous studies which have examined the timing of repetition have largely been conducted in centres with specialist DSH services<sup>4,5</sup>, and the most recent study has not been updated since 1980–81<sup>5</sup>. Because of the changing clinical epidemiology of self harm, we decided to reexamine this question in a different city with a less specialised DSH service.

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## Methods

At Leeds General Infirmary, self-poisoning patients are usually admitted to a medical or short-stay ward, although some who refuse admission are discharged directly from the accident and emergency (A&E) department. Previous audit has shown that 85% of these attenders at the hospital are seen for specialist psychiatric assessment before they go home, either directly from the A&E department or following inpatient admission. The psychiatrist who makes the assessment fills out a standardised proforma, and the information is transferred to a computerised database in the department of liaison psychiatry. We have used these data in a retrospective, two-year cohort analytical study in 1,576 consecutive patients seen by the psychiatric service, either on a medical ward or in the A&E department, to examine the problem of repetition (defined by repeat assessment following DSH in the first 12 months after contact). The impact of time to repetition on the effectiveness of aftercare arrangements for self-harm patients was assessed by examining the outcome of referral for a new outpatient appointment made for all patients over a six-month period during the study.

## Results

Of the total 1,576, 193 (12%) attended the hospital following a further episode of DSH in the next year, 138 (72%) once, 33 (17%) twice, 12 (6%) three times, four (2%) four times, three (1.5%) five times and three (1.5%) six times. Repetition was as frequent in women (104/882, 12%) as in men (89/694, 13%).

At psychiatric assessment, 562 (36%) patients reported a previous self-harm episode or already had one recorded on the database. Repetition was much commoner in those with a previous history (126/562, 22%) than among new cases (67/1,014, 7%) (relative risk: 3.4; 95% confidence interval: 2.6–4.5).

Median time to repetition in the first year was about 12 weeks overall (Table 1), but for those with a previous history of self harm it was half that of the new cases. For those who repeated DSH more than once in the year, the median time to repetition was shortest of all (6 weeks). Repetition was sometimes disconcertingly rapid: of those patients who repeated DSH in the first year, 14/126 (11%) with a past history and 6/67 (9%) with no past history did so in the first week.

In Leeds, as in many UK cities, people who require psychiatric outpatient follow-up are referred by the assessing psychiatrist to their local sector service. In one six-month period during the study, there were 45 such referrals, of whom:

	No. of patients	Median interval (days)	Interquartile range (days)
All cases	193	87	21-182
Women	104	99	21-182
Men	89	76	21-172
Age (years):			
<25	57	98	27-178
25-44	108	79	20-211
≥45	28	94	23-177
New case	67	140	38-259*
Previous episode(s)	126	72	15-152*
During follow-up:			
one repeat	138	104	31-222**
multiple repeats	55	42	14-114**

 Table 1. Time to first repeat of deliberate self harm within one year from inclusion episode.

\* Mann-Whitney, U = 7,540, p <0.01

\*\* Mann-Whitney, U = 14,500, *p* < 0.01

- only 22 (49%) attended the first appointment
- 19 (42%) did not attend and received no psychiatric contact
- four (9%) were admitted to hospital or seen on a domiciliary visit for suicidal behaviour before the first appointment.

#### Discussion

A study of patients seen at the Edinburgh regional poisoning treatment centre in 1980–81<sup>5</sup> found that about a quarter of those who were going to repeat self harm did so within four weeks; those with a previous history were more likely to repeat and to repeat early. Median times to repetition were not reported. Our results emphasise the importance of early repetition, especially in people with a previous history of self harm.

Interventions aimed at reducing repetition of self harm, fatal or otherwise, must be made within days, not weeks, of an identifying episode if they are to be effective. Referral to an orthodox psychiatric outpatient clinic is not an adequate response since nonattendance rates are high<sup>6</sup> and waiting times for an appointment too long in view of the short time lapse to repetition.

The problem of non-attendance can be overcome to some extent by an outreach service, which can achieve high contact rates by home visiting, both to make early contact and to offer follow-up treatment<sup>7</sup>. Speed of response for *immediate treatment* and not just for initial assessment will in many places require the appointment of a designated team to deliver such an outreach service. Such teams might consist of community psychiatric nurses and psychiatric social workers, with an appropriate level of medical input to meet the predominantly psychosocial needs of this population. One-quarter of all suicides have made a non-fatal attempt in the previous year,<sup>8</sup> so this is a vital message for the planners of suicide prevention services.

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