### EDITORIAL

# Parasuicide: features of repetition and the implications for intervention<sup>1</sup>

Parasuicide is one of the commonest causes of admission to medical wards in the UK, in recent years totalling up to 100000 cases annually. Of these it is estimated that at least a third have reported a previous episode of self-harm and that 15–25% will repeat within three months (Buglass & Horton, 1974*a*; Morgan *et al.* 1976; Bancroft & Marzack, 1977). The public health impact of parasuicide is therefore substantial: the burden on casualty, general medical and psychiatry services is considerable (Pallis *et al.* 1975) and the risk of suicide is high (Rygnestad, 1988).

## WHO ARE THE REPEATERS?

The first step in preventive intervention is the recognition of those at high risk of repetition but of the many studies of parasuicide, relatively few have focused on repeaters. Kreitman & Casey (1988) identified the psychosocial correlates of three annual cohorts of parasuicides, comparing those with a history of five or more previous attempts ('grand repeaters'), 2–4 attempts ('minor repeaters') and those presenting for the first time. 'Grand' repeating was associated with male sex and there were numerous associations of repetition in general, largely confirming the findings of previous important studies (e.g. Bagley & Greer, 1971; Buglass & Horton, 1974*a*; Morgan *et al.* 1976):

(a) demography – being divorced or separated, social class V, living alone, unemployment;

(b) psychiatric history – past psychiatric contact, drug or alcohol abuse, previous self-harm, parasuicide by a relative;

(c) behaviour – previous violence, criminality.

Other studies have taken a different approach, examining the attitudes and coping strategies of parasuicides who repeat. Kurz *et al.* (1987) discriminated three groups in a cluster analysis of a large sample of parasuicides. Although repeaters were distributed across all three groups, one group appeared to correspond to the epidemiologically defined repeaters from the Kreitman & Casey study. This was a group of young men with a long history of multiple self-harm episodes, suicidal pre-meditation, a high level of hostility and a diagnosis of personality disorder, who were three times as likely to repeat. Sakinofsky *et al.* (1990) came up with similar findings and added that repetition was not associated with failure to resolve the initial social stress but with its perceived severity and with persistent externally directed hostility.

Few studies have looked at a third aspect of parasuicide, distinct from epidemiological and attitudinal factors: the interaction with and use of services. However, one study, reported by Greer & Bagley (1971), found that refusal of psychiatric help was associated with repetition. In another paper the same authors found that the predictors of repetition were not the same in treated and untreated parasuicides (Bagley & Greer, 1971).

As to when repetition occurs, there is evidence of clustering. In a large sample of repeaters followed up for two years, 16% repeated in the first year, most – 14% of the males and 12% of the females – in the first three months (Bancroft & Marzack, 1977). Between 1 and 2 years, a further 2% repeated. Bancroft & Marzack put forward the possibility that three types of parasuicide repetition may take place: chronic repetition arising because of recurrent crises, bursts of repetition during periods of stress, and one-off repetition in severe crisis.

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## FROM CORRELATION TO FORMAL PREDICTION

Thus, a sub-group exists within the population of parasuicides, whose response to recurrent or persistent stress is to repeat the self-harm, and it appears that they may be identified by their attitudes and attributes, both psychiatric and demographic. But can they be identified before they repeat, and with an accuracy that could be clinically useful?

Buglass & Horton (1974b) collected data on all patients admitted to the Regional Poisoning Centre in Edinburgh and constructed a scale of six items which discriminated between repeaters and non-repeaters. These were similar to those listed above – (1) previous parasuicide resulting in admission; (2) previous psychiatric treatment as in-patient; or (3) out-patient; (4) alcohol problems; (5) a diagnosis of sociopathy; and (6) not living with relatives. When none of these was present, the probability of repetition within a year was 5%; when five or more items were present, the probability of repetition was 48%. This represents a high rate of false positives, but one which clinical practice could probably tolerate.

However, the same scale was also tested on two Italian samples of parasuicide patients (Garzotto et al. 1976; Siani et al. 1979). Although in both cases the probability scores were similar to those obtained by Buglass & Horton, other social and clinical features appeared to discriminate better between repeaters and non-repeaters (Garzotto et al. 1976), including one item – previous parasuicide not leading to admission – which was the opposite of one in the original list. Furthermore, the two Italian studies produced different lists of discriminating items. A further complication was revealed by Myers (1988) who compared the Buglass & Horton scale to a simple, freshly constructed 5-point list derived from answers to routine clinical questions about suicidal feelings. In general, the Buglass & Horton scale was a better predictor, but the clinical list showed better prediction, sensitivity and specificity for men aged under 35 years – according to previous work, the most numerous group among parasuicide repeaters.

These varying results underline the difficulties of developing a scale which is valid in different populations and in the same population at different times. Kreitman & Foster (1991) have also suggested that the factors which predict repetition may change as an individual's history progresses. Nevertheless, their own weighted prediction scale contains items similar or equivalent to those of Buglass & Horton, though Kreitman & Foster report that their own scale allows more efficient allocation of patients to low-, moderate- and high-risk groups.

One problem shared by predictive instruments that are intended for clinical use is their relatively low specificity. Most of the quoted figures are in the region of 50% for those identified as at high risk. However, Kreitman & Foster calculated that the numerical bulk of patients who would repeat were in their 'moderate risk' category, a group with an even lower specificity. This has important implications for intervention. It means that a service can either focus on those at highest risk or lower its threshold to include most of those who will repeat but in addition large numbers who will not.

#### FROM PREDICTION TO INTERVENTION

Greer & Bagley (1971) reported a reduced rate of repetition over one to two years in parasuicides who received psychiatric follow-up (20% if follow-up was prolonged) compared to those who received no follow-up (39%). Similar figures were reported by Kennedy (1972) in a one-year follow-up -12% who were admitted repeated the parasuicide compared to 39% of those not admitted. However, both studies were retrospective, so that the differences could have reflected the increased vulnerability of individuals who reject, or are not offered, further treatment.

Other studies have found that treatment by medical or non-medical personnel lasting around three months may lead to improvement in social adjustment (Chowdhury *et al.* 1973; Hawton *et al.* 1981), social problems (Gibbons *et al.* 1978) or mood (Hawton *et al.* 1981), but that no

corresponding reduction in parasuicide occurs, usually over a follow-up period of a year. Hirsch *et al.* (1982), reviewing intervention studies, concluded that no service innovation had proved able to reduce the risk of further parasuicide.

Relatively little research has taken place into service intervention since these studies, and the subject of repeat parasuicide is now one surrounded by therapeutic pessimism. Yet the magnitude of the problem has not changed and the need for new approaches is as great as ever. Is there, then, any way in which the research so far can be used to point towards future intervention strategies?

First, it shows that a relatively small proportion of parasuicides embark on a career of repetition, and that they have certain defining characteristics, allowing a degree of prediction. For service planning, these form the important group: those who will not repeat the self-harm are not in comparable need. The first step for a parasuicide service is therefore to identify likely repeaters, just as most self-harm services currently identify potential suicides.

Secondly, there is the recognition that repeaters have a combination of difficulties which can be summarized as follows:

(a) increased social stress – Paykel (1975) has shown that life events cluster in the six months preceding parasuicide;

(b) poor coping skills;

(c) maladaptive contact with services, equivalent to some cases of abnormal illness behaviour.

Even in studies in which social stress has been reduced, the remaining difficulties appear to be too entrenched to improve, suggesting that parasuicidal behaviour is self-reinforcing. Identification and treatment of repeaters must therefore be achieved early in their history of repeating – no studies have looked exclusively at such an early group – and must continue long enough to reverse the parasuicidal pattern, perhaps beyond the three-month period of previous studies. Equally clearly, the teaching of a more adaptive service contact is an essential part of treatment. Although some researchers found that improving the availability of support for parasuicides does not reduce the risk of repetition (Chowdhury *et al.* 1973; Hawton *et al.* 1981), it was not apparent in these studies that specific teaching took place on alternate ways of communicating distress.

Such treatment would require parasuicides to recognize the dangers of their acute stresses, to contact services early at times of distress and, crucially, to view parasuicide as a comparatively unsuccessful way of recruiting help. This needs extensive teaching and emphasis, particularly in patients who have already learned to contact services through self-harm. Good clinical practice already embodies these principles in working with individual high-risk patients. It remains to be seen whether research can be sophisticated enough to assess whether such an approach can achieve its aims.

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#### REFERENCES

- Bagley, C. & Greer, S. (1971). Clinical and social predictors of repeated attempted suicide: a multivariate analysis. *British Journal* of Psychiatry 119, 515–521.
- Bancroft, J. & Marzack, P. (1977). The repetitiveness of selfpoisoning and injury. British Journal of Psychiatry 131, 394-399.
- Buglass, D. & Horton, J. (1974a). The repetition of parasuicide: a comparison of three cohorts. British Journal of Psychiatry 125, 168-174.
- Buglass, D. & Horton, J. (1974b). A scale for predicting subsequent suicidal behaviour. British Journal of Psychiatry 124, 573-578.
- Chowdhury, N., Hicks, R. C. & Kreitman, N. (1973). Evaluation of an aftercare service for parasuicide patients. *Social Psychiatry* 8, 67-81.
- Garzotto, N., Siani, R., Tansella, C. Z. & Tansella, M. (1976). Cross validation of a predictive scale for subsequent suicidal behaviour in an Italian sample. *British Journal of Psychiatry* 128, 137–140.

- Gibbons, J. S., Butler, J., Urwin, P. & Gibbons, J. L. (1978). Evaluation of a social work service for self-poisoning patients. *British Journal of Psychiatry* 133, 111-118.
- Greer, S. & Bagley, C. (1971). Effects of psychiatric intervention in attempted suicide: a controlled study. *British Medical Journal* i, 310-312.
- Hawton, K., Bancroft, J., Catalan, J., Kingston, B., Stedeford, A. & Welch, N. (1981). Domiciliary and outpatient treatment of selfpoisoning patients by medical and non-medical staff. *Psychological Medicine* 11, 169-177.
- Hirsch, S. R., Walsh, C. & Draper, R. (1982). Parasuicide. A review of treatment interventions. *Journal of Affective Disorders* 4, 299-311.
- Kennedy, P. (1972). Efficacy of a Regional Poison Treatment Centre. British Medical Journal iv, 255-257.
- Kreitman, N. & Casey, P. (1988). Repetition of parasuicide: an epidemiological and clinical study. *British Journal of Psychiatry* 153, 792-800.

- Kreitman, N. & Foster, J. (1991). The construction and selection of predictive scales, with special reference to parasuicide. British Journal of Psychiatry 159, 185-192.
- Kurz, A., Moller, H. J., Baind, L. G., Burk, F., Torhorst, A., Wachtler, C. & Lauter, H. (1987). Classification of parasuicide by cluster analysis. Types of suicidal behaviour, therapeutic and prognostic implications. *British Journal of Psychiatry* 150, 520-525.
- Morgan, H. G., Barton, J., Pottle, S., Pocock, H. & Burns-Cox, C. (1976). Deliberate self-harm: a follow-up study of 279 patients. British Journal of Psychiatry 128, 361-368.
- Myers, E. D. (1988). Predicting repetition of deliberate self-harm: a review of the literature in the light of current study. Acta Psychiatrica Scandinavica 77, 314–319.
- Pallis, D. J., Langley, A. M. & Birtchnell, J. (1975). Excessive use of the psychiatric services by suicidal patients. *British Medical Journal* iii, 216–218.
- Paykel, E. (1975). Suicide attempts and recent life events. Archives of General Psychiatry 32, 327–333.
- Rygnestad, T. (1988). A proprective 5-year follow-up study of selfpoisoned patients. Acta Psychiatrica Scandinavica 77, 328–331.
- Sakinofsky, I., Roberts, R., Brown, Y., Cunning, C. & James, P. (1990). Proper resolution and repetition of parasuicide: a prospective study. *British Journal of Psychiatry* 156, 395-399.
- Siani, R., Garzotto, N., Tansella, C. Z. & Tansella, M. (1979). Predictive scales for parasuicide repetition. Acta Psychiatrica Scandinavica 59, 17-23.