*Regular review*

# Management of patients who deliberately harm themselves

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Deliberate self harm is a behaviour not an illness. It is defined as any act by an individual with the intent of harming himself or herself physically and which may result in some harm. Deliberate self harm has also been called "attempted suicide" or "parasuicide." Although attempted suicide should be restricted to cases where a fatal intent can be assumed, these terms are often used synonymously. Suicide is the subcategory with a fatal outcome.

## Incidence

Typically 10-30 per 100 000 people commit suicide annually. Deliberate self harm that is non-fatal may be 10-20 times more frequent. Both fatal and non-fatal deliberate self harm constitute considerable public health problems regarding both individual suffering and costs to society.

## Cause

The motivations behind acts of deliberate self harm vary. One motivation may be a wish to die. Deliberate self harm may also constitute a more or less dysfunctional way of achieving wanted changes of life—for example, escape, attention, manipulation of others. The intent in each person is complex and ambivalent. Although some aspects of suicidal behaviour might be interpreted as rational, the behaviour is contrary to basic biological principles of survival. Therefore it may be postulated that some link in the individual's perception, cognitive and emotional processing, and behaviour is disordered—that is, a psychiatric disorder. This is corroborated by empirical studies.

## Prognosis

In a two year Swedish study of 812 consecutive patients who had deliberately harmed themselves, 11% (89 patients) repeated the non-fatal act and 2% (16) committed suicide during the study period.[1] It is usually estimated that up to 10% will commit suicide within 10 years. An act of deliberate self harm is therefore an ominous sign for repeated acts.

## Methods

Little, if any, conclusive evidence is available on how to prevent deliberate self harm. Two or three controlled studies have shown significant differences in outcome between intervention and control groups, but all are open to some criticism.[2,3] On the basis of these few controlled studies, abundant naturalistic studies, and unsystematic clinical experiences and wisdom, several national and local guidelines have been created by consensus committees. One problem in creating guidelines is how to interpret the huge but inconclusive literature. As this review is not aimed at being a meta-analysis but attempts to make clinical sense of the published data, it is impossible to avoid interpreting the data on the basis of our own scientific and clinical experiences. We have also made use of the guidelines from the Swedish Psychiatric Association.[4]

### Summary points

- Patients who deliberately harm themselves should be assessed as comprehensively and thoroughly as possible, including the risk for suicide
- A multidisciplinary team approach to assessment and management is optimal
- A psychiatrist should be involved in the evaluation
- Management should be individualised on the basis of the assessment; mostly treatment for associated psychiatric disorders and assistance with precipitating circumstances
- Patients accepting offers for help should be followed up quickly

## Scientific problems

A basic problem of descriptive studies of deliberate self harm is the selection of the study population. Selection determines what generalisations can be made. Suicides can be studied with few dropouts, but the data cannot be generalised to deliberate self harm that is non-fatal. In studies of such self harm, large dropout rates are common.

A main obstacle in studies of treatment effects is the heterogeneity of the patients. It is likely that different

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*BMJ* 2001;322:213–5

patients may best benefit from different interventions. Studies using a single management strategy with unselected mixed patients who deliberately harm themselves may not, therefore, show beneficial effects for the group at large even though specific subgroups may benefit greatly. Furthermore, because the outcome measure, deliberate self harm, is a relatively rare occurrence, studies often lack statistical power to show significant effects of an intervention.[2]

**Comprehensive assessment**

Efforts to prevent repeated deliberate self harm must start immediately after the acute physical care of the patient. The most relevant aspects must be assessed and addressed at the first evaluation. This evaluation is one of the most serious and complicated tasks in psychiatry. Thus we believe a psychiatrist should be involved in the evaluation.

*Guideline 1: all acute and chronic comorbid psychiatric diagnoses should be established*

Studies of patients who deliberately harm themselves have shown that 90-99% had one or more psychiatric disorders.[5 6] It may well be assumed that the disorders played a major role in the chain of events that led to deliberate self harm. It is further likely that the disorders also played a dominant role in the immediate circumstances that precipitated the deliberate self harm.

The most common diagnoses in people who commit suicide are depressive disorder (50-90%) and disorders of substance use (25-50%).[7–9] Personality disorders (borderline, antisocial) are also found commonly in people who commit suicide, particularly young people.[10] Depression has been found almost as often in people who commit deliberate self harm that is non-fatal as it has in people who commit suicide, but it seems that personality disorders and disorders of substance use play a more prominent role here.[6 11] A recent study found that 56% of the subjects who deliberately harmed themselves had at least two psychiatric disorders, not counting personality disorders.[6] In another study, histrionic and dependent personality disorders were commonly found in those cases where the suicidal intent was judged to be absent.[11]

The diagnostic procedure should not be limited to a superficial level. This may be particularly important when a patient seems to fulfil the criteria for a personality disorder. A patient who acutely has a psychiatric disorder often seems to have a personality disorder. Further, some typical "borderline" symptoms like emotional instability, anger, paranoid thoughts, and unstable self esteem are often found, for example, in bipolar disorder and adult attention deficit and hyperactivity disorder.[12 13]

*Guideline 2: all circumstances and motivations around deliberate self harm should be investigated*

Interpersonal conflicts seem to be an important precipitating factor in at least 50% of patients who commit deliberate self harm.[5] Several other factors are often found but at lower rates—for example, worries about unemployment and physical illness.[5] Such factors may be the only problems of which the patient is aware. Starting a treatment relationship by addressing these factors with the patient is important even if the eventual plan is directed more specifically at treating underlying psychiatric disorders. This investigation may also help the patient to become more aware of dysfunctional thinking and behaviour, which may begin motivation for further cognitive-behavioural therapy.

*Guideline 3: the short term risk for suicide should be carefully evaluated*

An increased long term risk must be assumed in every patient. A high short term risk is usually associated with an identifiable and treatable psychiatric disorder.

It is important to assess the patient's reported attitude about living. This may range from a wish to live, through ambivalence, wishes for death, and vague thoughts of suicide, to detailed plans for suicide.

The following objective factors in association with an act of deliberate self harm indicate a high risk for suicide:

- A medically serious act of deliberate self harm
- Precautions having been taken against being found
- Previous episodes of deliberate self harm
- Depression and psychoses
- Substance misuse
- Comorbidity
- Impulsive and aggressive personality traits
- Loneliness and lack of a social network.

Questioning relatives and friends about what the patient has recently said or done may expose, possibly covert, suicidal communication. For example, the patient has said "I'll never come back" or the patient has given away personal belongings.

**Individualised comprehensive management**

The model for treatment is to help the patient become better able to functionally deal with the problems of life. This implies an individualised plan, including the treatment of psychiatric disorders as well as the development of skills to solve external problems. If there might be an immediate risk for suicide, management must start with its elimination. Compulsory admission to a secure facility for psychiatric treatment may be necessary.

*Guideline 4: long term treatment of chronic psychiatric syndromes should be included*

Several studies of prescriptions and the results of toxicology tests at post mortem examination in individuals who committed suicide have shown that less than 20% had been treated with antidepressants at the time of death.[14–16] This suggests substantial undertreatment in this category of people. Likewise, in the Swedish study of 812 consecutive patients who committed deliberate self harm that was non-fatal, 615 patients (76%) harmed themselves by self poisoning with drugs. The drug was an antidepressant, however, in only 29 of the 812 patients (3.6%).[1] Provided that the drugs used for poisoning reflect those available to the patient, this finding suggests that undertreatment of depression also occurs in patients who commit deliberate self harm that is non-fatal.[5 17] This was further shown in a study from Finland where only 7 of 43 patients (16%) who had attempted suicide and who had been diagnosed with major depression had received adequate antidepressant treatment.[18]

Evidence shows that long term treatment with lithium prevents non-fatal as well as fatal deliberate self harm in patients with bipolar disorder.[19 20] Further evidence shows that an increased use of antidepressants may decrease suicide rates.[16] A one year randomised clinical trial of paroxetine compared with placebo in non-depressed patients who repeatedly harmed themselves suggested that this antidepressant was effective in reducing further self harm.[21] A form of cognitive-behavioural therapy in women with borderline personality disorder was reported to have a superior effect over standard care for the number of acts of deliberate self harm and their medical seriousness after one year.[22] Non-specific psychosocial interventions have not been shown to have any impact on the future repetition of acts of deliberate self harm.[23]

*Guideline 5: practical help with immediate precipitating factors should be offered*

Although the key to preventing repeated deliberate self harm may lie more importantly in long term treatment, attention to assisting with immediate precipitating factors should provide a concrete point of departure for long term management, which is the key to preventing repeated deliberate self harm. A great challenge lies in managing patients who refuse all offers of help owing to hostility or denial. Unless the legal criteria for compulsory admission are met, they must of course be free to go if they insist. It must be remembered that many of these patients, predominantly with personality disorders, do not have the skills for seeking or accepting help even when desperately needed. They also provoke anger because of their self destructive behaviour and their refusal of help. Anticipating and expecting this behaviour makes it easier for caregivers to maintain their professional demeanour, which improves the chance of treatment being established.

*Guideline 6: rapid and systematic follow up should be provided*

Repeated deliberate self harm cannot be prevented in the emergency unit but depends on longer term contact. Brief admission to hospital should be considered, as this may lay the best groundwork for a good therapeutic relationship. Otherwise, patients should be offered rapid follow up, ideally with the person who made the first assessment. Regardless, when leaving the emergency unit the patient must know where, when, and preferably with whom the follow up appointment will be.

## Conclusion

We believe that the results of research on the management of patients who deliberately harm themselves have been limited by the lack of individualised planning protocols for treatment. On the other hand, we believe that the almost universal occurrence of psychiatric disorders among patients who deliberately harm themselves suggests that individualised planning of treatment is best begun with formal psychiatric evaluation. Although further evidence is needed, it seems reasonable to assume that individualised attention to treating the underlying psychiatric disorders and assisting with psychosocial precipitating factors offers the best hope for forestalling deliberate self harm in the future.

Competing interests: None declared.


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*(Accepted 19 October 2000)*

*Endpiece*

### Superspecialisation BC

The Greek historian Herodotus was born around 490 BC. His book two of *The Histories* (translation by Aubrey de Sélincourt, revised by John Marincola, London: Penguin,1996) is concerned with the Egyptians and includes the following passage: "The practice of medicine they split into separate parts, each doctor being responsible for the treatment of only one disease. There are, in consequence, innumerable doctors, some specialising in diseases of the eyes, others of the head, others of the teeth, others of the stomach, and so on; while others, again, deal with the sort of troubles which cannot be exactly localised."

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