Psychiatry

Edited by Christopher Bass MA MD FRCPsych,
Consultant in Liaison Psychiatry, John Radcliffe Hospital, Oxford

Self-harm in the general hospital

Navneet Kapur MBChB MRCPsych MMedSc MD, Senior Lecturer in Psychiatry and Head of Research, *Centre for Suicide Prevention, University of Manchester*

Clin Med 2006;6:529–32

Self-harm is a major public health problem, accounting for over 170,000 hospital attendances annually in the UK.[1] Most cases (80%) involve self-poisoning. Patients who harm themselves are at greatly increased risk of subsequent suicide.[2] Suicide reduction is one of the cornerstones of current UK mental health policy – the latest government target is a reduction of 20% by 2010.[3] The rigorous management of self-harm patients in the general hospital setting might help to achieve this target as well as improving service provision for a neglected patient group.

Definition

Several terms have been used to describe aspects of suicidal behaviour (eg para-suicide, attempted suicide, overdose, self-injurious behaviour). 'Deliberate self-harm' can be defined as an act of intentional self-poisoning or injury irrespective of the apparent purpose of the act.[4] Recently, the prefix 'deliberate' has been dropped from 'self-harm' in response to the heterogeneous nature of the phenomenon and the concerns of service users.[1,5] The term 'self-harm' will be used throughout this article.

Epidemiology

Large community surveys suggest that 4.6% and 4.4% of US and UK populations, respectively, have previously harmed themselves.[6,7] Incidence rates of self-harm tend to be based on hospital-treated episodes and so may underestimate the scale of the problem. The current incidence of self-harm is 300–500 cases per 100,000 per year.[8,9] In the past twice as many women as men harmed themselves, but currently the numbers are almost equal in many centres.[10] Peak ages are 15–24 years for women and 25–34 years for men. There are some suggestions of an increased incidence in certain ethnic groups: for example, young women of South Asian origin are 2.5 times more likely to harm themselves than white women. In most cases, individuals report that the episode was precipitated by interpersonal or social problems.

Early studies suggested that only a minority of self-harming patients have clinically important psychiatric illness, but more recent work indicates that up to 90% may have a psychiatric disorder according to ICD-10 criteria.[11] The most common diagnosis is affective disorder (70%), but such disorders may be self-limiting. Between a quarter and a half of patients misuse alcohol.

In recent work examining trends in self-harm,[8,12] overdoses of paracetamol have become less common (following legislation restricting pack sizes), but antidepressant overdoses (particularly selective serotonin reuptake inhibitors overdoses) have become more common. The proportion both of patients misusing alcohol and of those who repeat self-harm has risen. For example, in Oxford the percentage of individuals repeating self-harm within one year of an episode increased from 14.4 to 21.4% between 1990–1992 and 1997–1999.

Despite the scale of the problem, services for self-harm patients have traditionally been highly variable and poorly delivered.[13,14]

Outcome

The two main outcomes of self-harm of particular importance are repetition and suicide. The one-year repetition rate for self-harm is about 15%.[2] Repetition tends to occur quickly: one-quarter of patients repeat within three weeks, with a median time to repetition of only 12 weeks. Follow-up studies have shown

Key Points

- Self-harm is a major public health problem with an estimated 170,000 hospital-treated episodes in the UK each year
- Self-harm is strongly associated with suicide: the risk of suicide is increased 50–200 times in the year after an episode
- It is unclear which interventions are most effective following self-harm, principally because research trials to date have been too small
- Two important sets of treatment guidelines have been published recently but the evidence base for these is relatively weak
- Promising interventions include problem-solving treatment, interpersonal therapies, cognitive therapy and more specific interventions in subgroups of patients

KEY WORDS: attempted suicide, epidemiology, guidelines, hospital services, intervention studies, needs assessment, outcomes, psychosocial assessment, risk assessment, self-harm

rates of suicide of 1.8% in the year after a self-harm episode, 3% at five years and about 7% for periods longer than nine years.[2] Rates of suicide are 50–200 times the general population rate.

Much has been made of so-called risk factors for repetition and suicide but they are of only limited usefulness in everyday practice because of their poor predictive value. There is some indication that people who cut themselves are at greater risk of eventual suicide than those who harm themselves using other methods.[15]

Management in the general hospital

Three basic principles can be applied to all patients after a self-harm episode:

1 The initial priority is to ensure that the individual's *physical condition* is thoroughly assessed and appropriately managed, followed by a *psychosocial assessment* to identify and manage those with significant mental health problems and those at high risk of suicide. Ideally, a multidisciplinary self-harm team might provide such assessments.[1] However, many specialists would agree that staff in general medical settings are able to carry out adequate assessments if appropriately trained and supervised;[5] non-psychiatric staff tend to be more cautious in their assessment than psychiatric staff.[16] Information collected during a psychosocial assessment might include conscious level, psychiatric history and mental state examination, social situation and recent life events, alcohol and drug use, and a risk assessment.

2 *Risk assessment* (ie assessing the risk of future self-harm or suicide) is an important clinical skill. Risk is not easy to quantify and is difficult to assess because the available tools are crude, and the outcomes in which clinicians are interested (self-harm repetition or suicide) are rare. It is probably helpful to focus on four areas when carrying out a risk assessment (Table 1):
   - suicidal intent
   - current psychiatric state
   - social support
   - epidemiological risk factors.

3 Following a psychosocial assessment each patient should ideally have an *individualised management plan.* This might involve treatment for psychiatric disorder, admission to a psychiatric inpatient facility or brief psychological treatments.

Current guidelines

The evidence base on which recent guidelines are based is weak but provides a consensus view of current best practice.

The full version of the National Institute for Health and Clinical Excellence guideline[1] is over 200 pages long and is unusual in that it considers both the physical and psychosocial management of self-harm.

Physical management includes the role of triage in the emergency department, the treatment of superficial wounds and guidance on toxicological issues, for example:

- screening for paracetamol concentration
- the role of gut decontamination
- the management of salicylate, paracetamol, benzodiazepine and opioid overdose.

Psychosocial management includes issues related to:

- consent
- the role of psychosocial assessment
- interventions to prevent repeat episodes of suicidal behaviour.

The guidelines also include service users' experience of services and consider issues specific to young people and older adults. There seems to be a growing

Table 1. Risk assessment following self-harm.

Suicidal intent of current episode	Premeditation Risk of discovery Calls for assistance Stated intent Actual and perceived lethality of method
Psychiatric state	Depressive features Guilt and hopelessness Continued suicidal thoughts Alcohol and drug misuse Impulsive or aggressive personality traits
Social support	Housing Employment Family support Social isolation Involvement of statutory or non-statutory organisations
Epidemiological risk factors:	
• Repetition	Previous history of self-harm Psychiatric history Unemployment Lower social class Alcohol or drug problems Criminal record Antisocial personality Lack of cooperation with treatment Hopelessness High suicidal intent
• Suicide	Older age Male Previous history of self-harm Psychiatric history Unemployment Poor physical health Social isolation

Table 2. General and specialist competencies for self-harm assessment.[5]

Staff level	Competencies
General clinical staff	Prompt assessment and treatment of patient's physical condition Basic psychosocial and mental state assessment Detection of immediate suicide risk Judgement of when to refer for specialist opinion Making a culturally relevant assessment Basic understanding of medicolegal issues
Specialist clinical staff (additional competencies)	Diagnostic formulation Assessing risk of further self-harm Drawing up and implementing management plans Liaison with appropriate services Assessing hostile/guarded patients

recognition of the value of assessments of need rather than just a preoccupation with assessments of risk. Many of the key recommendations would be regarded by many as simply components of good clinical practice.

The Royal College of Psychiatrists' guideline[5] describes clinical competencies that might be expected of staff, both general and specialist (Table 2). It also describes standards of service provision in a variety of settings. The standards in the emergency department and the general hospital are listed in Table 3.

Consent and use of the Mental Health Act

The issues of consent to treatment and use of the Mental Health Act 1983 following self-harm attempts are complex. The clinician is often confronted with an individual who sees no way out of his or her current difficulties, is ambivalent about future suicidal intent and hostile to the involvement of professionals. There are some general points to bear in mind. The Mental Health Act can be used only when there is evidence of mental disorder. Even then, there is ambiguity about whether it can be used to administer treatments for physical health problems.[1]

In other cases the treatment of a patient who does not give consent will be under common law (that is, the common law doctrine of necessity will apply and staff should act in the person's best interests in a manner consistent with good practice). This will involve an initial assessment of capacity to consent to treatment. 'Capacity' refers to the ability to comprehend and retain information, believe it and weigh it in the balance to arrive at a choice. In practice, there is often sufficient doubt about the capacity of many patients who refuse intervention following self-harm to allow potentially life-saving treatment to be given under common law. Clinicians should seek advice from the legal departments of their own hospitals and medical defence organisations. The recent guidelines discuss these issues in more detail.[1,5]

Interventions

Psychiatric disorder and continued suicidal intent need to be managed appropriately, perhaps by pharmacological means or admission to hospital. Aftercare should be provided promptly in view of the fact that a quarter of patients who self-harm do so again within three weeks. It is widely reported that no treatments for self-harm reduce repetition rate but this is principally because studies to date have been too small.[17]

There are a number of promising interventions:

- *Problem-solving therapy* is a brief, problem-orientated, cognitively based treatment.
- *Brief psychodynamic interpersonal therapy* explores interpersonal

Table 3. Standards in the emergency department (ED) and general hospital setting.

Planning and organisation	A self-harm planning group should be in place Ideally, care should be provided by self-harm teams
Clinical procedures and facilities	Immediate assessment of risk on arrival Appropriate assessment facilities (eg designated private room) Availability of clinical management options (eg prompt access to junior and senior mental health specialists, social services) Liaison with patient's GP within 24 hours Patients who are physically well and not intoxicated should not wait for more than three hours in the ED Good practice to liaise with an informant Provide written material about available local services to patients Those aged <16 or >65 should usually be referred to specialist services
Training and supervision	Adequate training for all staff Consider systematic collection of information using a form Specific training in assessing capacity Specialist staff should have a suitable professional background (eg nursing, social work, psychology, occupational therapy, psychiatry) For specialists, a minimum of three joint assessments should be carried out initially followed by at least six closely supervised assessments. These should be recorded in a log book Relevant literature should be pointed out to new staff Regular access to supervision with senior staff and access to immediate supervision to discuss emergency cases

GP = general practitioner.

problems that cause or exacerbate psychological distress.

- *Cognitive therapy and telephone contact.* Promising results have also been reported recently for more intensive courses of cognitive therapy and telephone interventions.
- *Other possible treatments* may be helpful for subgroups of patients (eg dialectical behaviour therapy for individuals who repeatedly self-harm, group therapy for adolescents). Brief interventions (eg provision of crisis cards or letter writing interventions in which individuals disengaged from services are regularly contacted by post) may seem an attractive option. Findings from trials of these therapies have been inconsistent and further research is necessary before such interventions can be recommended for routine clinical use.

References

1 National Collaborating Centre for Mental Health. *Self-harm: the short term physical and psychological management and secondary prevention of self-harm in primary and secondary care* (full guideline). Clinical Guideline 16. London: National Institute for Clinical Excellence, 2004. www.bps.org.uk/publications/publications_home.cfm

2 Owens D, Horrocks J, House A. Fatal and non-fatal repetition of self-harm. Systematic review. *Br J Psychiatry* 2002;181:193–9.

3 Department of Health. *National suicide prevention strategy for England.* London: DH, 2002.

4 NHS Centre for Reviews and Dissemination. Deliberate self-harm. *Effect Health Care Bull* 1998;4:1–12.

5 Royal College of Psychiatrists. *Assessment following self-harm in adults.* London: RCPsych, 2004. www.rcpsych.ac.uk/publications/cr/index.htm

6 Kessler RC, Borges G, Walters EE. Prevalence of and risk factors for lifetime suicide attempts in the National Comorbidity Survey. *Arch Gen Psychiatry* 1999;56:617–26.

7 Meltzer H, Lader D, Corbin T *et al. Non-fatal suicidal behaviour among adults aged 16–74 in Great Britain.* London: Office for National Statistics, The Stationery Office, 2002.

8 Hawton K, Harriss L, Hall S *et al.* Deliberate self-harm in Oxford, 1990–2000: a time of change in patient characteristics. *Psychol Med* 2003;33:987–95.

9 Kelly J, Cooper J, Johnston A *et al. Manchester self-harm project*, 5th year report. Manchester: University of Manchester, 2002.

10 Gunnell D, Bennewith O, Peters T, House A, Hawton K. The epidemiology and management of self-harm amongst adults in England. *J Public Health (Oxf)* 2005;27:67–73.

11 Haw C, Hawton K, Houston K, Townsend E. Psychiatric and personality disorders in deliberate self-harm patients. *Br J Psychiatry* 2001;178:48–54.

12 O'Loughlin S, Sherwood J. A 20-year review of trends in deliberate self-harm in a British town, 1981-2000. *Soc Psychiatry Psychiatr Epidemiol* 2005;40:446–53.

13 Kapur N, House A, Creed F *et al.* Management of deliberate self poisoning in adults in four teaching hospitals: descriptive study. *BMJ* 1998;316:831–2.

14 Bennewith O, Gunnell D, Peters TJ, Hawton K, House A. Variations in the hospital management of self harm in adults in England: observational study. *BMJ* 2004;328:1108–9.

15 Cooper J, Kapur N, Webb R *et al.* Suicide after deliberate self-harm: a 4-year cohort study. *Am J Psychiatry* 2005;162:297–303.

16 Kapur N, Cooper J, Rodway C *et al.* Predicting the risk of repetition after self harm: cohort study. *BMJ* 2005;330:394–5.

17 Hawton K, Townsend E, Arensman E *et al.* Psychosocial versus pharmacological treatments for deliberate self harm. *Cochrane Database Syst Rev* 2000;(2):CD001764.