

# Summary Australian and New Zealand clinical practice guideline for the management of adult deliberate self-harm (2003)

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**Objective:** To provide a summary of the Royal Australian and New Zealand College of Psychiatrists (RANZCP) Clinical Practice Guideline for the Management of Deliberate Self-Harm.

**Conclusions:** This guideline covers self-harm regardless of intent. It is an evidence-based guideline developed from a systematic review of epidemiological, treatment and medico-legal literature. All patients presenting to hospital after deliberate self-harm should be comprehensively assessed to detect and treat the high rates of mental disorders, alcohol and other drug problems and personality disorders in this group. General hospital management aims to ensure safety from further self-harm, assess and treat injuries; prevent disablement and death as a result of injuries or poisoning and manage suicide risk by ensuring prompt psychiatric referral and mobilizing social supports. Psychological management aims to detect and treat underlying mental disorders, reduce distress and enhance coping skills and thereby, reduce repeat episodes and habituation of self-harm. Managing suicide risk is a continuous responsibility and suicide vulnerability may persist long-term in some patients. There is little firm guidance from the literature on treatment efficacy to guide ongoing psychiatric management. Studies are often compromised because between 41 and 70% of patients do not attend follow up. The mainstay of psychological care remains the treatment of underlying Axis I and Axis II disorders. Cognitive-behavioural therapy (CBT) and problem-orientated approaches appear promising for reducing repeated self-harm for most patient groups but no single treatment has confirmed superiority. Dialectical behaviour therapy (DBT) appears to confer most benefit. Self-harm may follow some forms of in-depth therapy in some vulnerable individuals. There is no one recommended pharmacological treatment specifically to reduce self-harming behaviours. Lithium may have antiself-harm properties for some groups with bipolar disorder. There is emerging evidence for self-harm reduction using clozapine for patients with schizophrenia and schizoaffective disorder.

**Key words:** clinical practice guidelines, deliberate self-harm, Royal Australian and New Zealand College of Psychiatrists.

## INTRODUCTION

Deliberate self-harm (including self-injury and self-poisoning with or without suicidal intent) is a common and serious health problem. It comprises a significant part of the workload of emergency departments, outpatient and inpatient mental health services. Engaging patients in treatment and providing effective services are

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challenges, particularly in light of the need to screen for and manage suicide risk in this diverse patient group.

This summary is intended for use by specialist mental health-care providers in Australia and New Zealand. The guideline may also be useful for emergency department clinicians. How to apply the guideline and the key to the levels of evidence (National Health and Medical Research Council (NHMRC)-defined) are published in an introductory paper elsewhere.<sup>1</sup> Two consumer guidelines have also been developed.

A guideline on this topic is justified because of the potential for fatal outcome and because of the complexity of presenting issues. Moreover, research shows [III-2] that improved service organization, if sustained with staff education and supportive management, can reduce barriers to accessing specialist mental health care by these patients.<sup>2</sup> International reviews and existing clinical and service development guidelines on deliberate self-harm (see comprehensive version) report that clinician and patient attitudinal barriers, fragmentation in the organization of mental health services, and less than optimal links between specialist and primary care pose barriers to effective care.<sup>3</sup> A guideline may help address these barriers.

### Definitions

Deliberate self-harm is defined as an act of intentional self-poisoning or self-injury, irrespective of the apparent purpose of the act. Self-injury includes a wide variety of behaviours: self-mutilation; cutting; jumping from heights; attempted hanging; car crashes that are deliberate; and burning. Self-poisoning refers to an overdose of medications or the ingestion of other substances. Self-mutilation usually refers to self-harm where non-suicidal intent at the time of the injury is clear.

We excluded self-harm that is acceptable in some subcultures, for example: piercing, tattooing, high-risk-taking behaviour and the recreational misuse of drugs or alcohol. We also excluded studies concerning developmental disability. We included deliberate self-harm with non-fatal and fatal outcome, both with and without, or with uncertain suicidal intent.

### Overview of deliberate self-harm

Although it evokes strong negative feelings in some health professionals, repeat deliberate self-harm is a relatively infrequent problem with a low base rate of presentations. Furthermore, between 41 and 70% of adolescents and adults who present with an index episode of deliberate self-harm do not attend follow-up treatment.<sup>4</sup> Treatment studies usually recruit only small numbers and rarely achieve statistical power to demonstrate the effectiveness of interventions. This hampers the further development of an evidence base for individualized treatment approaches. The mainstay of treatment is the detection and management of

underlying mental disorders and the prevention of further episodes.

Most current knowledge about the patient population is based on hospital registration studies and little is known about deliberate self-harm in the general population. In hospital samples, psychiatric disorders are present in >50%. Drug and alcohol abuse, personality disorders and physical illness are all overrepresented. Recent meta-analysis of risk performed by Australian researchers as part of a World Health Organization (WHO) regional burden of disease study reported significantly elevated rates of suicide attempts in those with childhood sexual abuse histories.<sup>5</sup> Intoxication with alcohol and other substances is common prior to self-harm and may confound diagnosis and complicate assessment and management.

Patients may be difficult to engage in a therapeutic alliance. Although the majority harm themselves only once, management requires providing assessment to the large numbers of persons presenting with varied needs. Services must determine management approaches that are feasible to deliver. Mental health teams must be able to direct long-term effort toward those at most risk of repeat episodes. Public health approaches are used in combination with clinical service delivery approaches.

### Overview of the clinical epidemiology: rates of deliberate self-harm

Notwithstanding the lack of comparable definitions and outcomes, hospital registration studies in Australia<sup>6</sup> and New Zealand<sup>7</sup> in 1997/1998 and in 1998/1999, report the rate for self-harm between 73 and 159 per 100 000. This is likely to be an underestimate. The most common form of deliberate self-harm is self-poisoning, which accounts for between 73 and 84% of all hospitalized cases.<sup>8</sup> Deliberate self-harm is more common among women and the highest rate is among men aged 25–34 and women aged 15–24.<sup>9–12</sup>

The closest local estimates come from the Australian National Survey of Mental Health and Wellbeing of 10 641 adults in 1997, with a self-reported lifetime prevalence of 'attempted suicide' of 2500 for male subjects to 4500 for female subjects per 100 000 population.<sup>4</sup> In New Zealand, the rate for male subjects and female subjects in a similar survey in 1986 was 4430 per 100 000.<sup>13</sup>

Risk of repeat is highest within the first 3–6 months and declines slightly thereafter but remains high for a significant proportion of patients in the long term, with a cumulative rate of approximately 10% at 10 years.<sup>11</sup> Patients presenting with deliberate self-harm also show increased rates of death from other causes.<sup>14</sup>

## METHOD

From our systematic review of English language studies last updated in December 2002, a multidisciplinary team made recommendations in discussion with consumers, carers and clinicians as to their information needs. Our method is reported in full in the comprehensive version.

## ASSESSMENT

### Initial acute management

Acute general hospital management involves treating the effects of the injury or poisoning through coordinated multidisciplinary care, often involving numerous medical disciplines. Once stabilized, the patient must have a comprehensive psychiatric assessment as soon as possible, but essential collaborative information from relatives, the patient's local doctor, or those attending with the patient can be collected prior and documented.

***Acute psychiatric management should include risk assessment, psychiatric assessment, psychosocial assessment as well as an assessment of the availability of local services.***

Acute psychiatric management involves:

1. engaging and establishing a therapeutic alliance with the patient;
2. identifying and treating underlying mental disorders where present;
3. comprehensive assessment of risk of harm to self and others;
4. psychosocial assessment;
5. initiating treatment planning with patient, family and other health services;
6. documenting the assessment status of the person's safety between transitions of care and at discharge from the hospital; and
7. including longer-term goals such as enhancing resilience and promoting adaptive coping strategies.

***All patients presenting to hospital after deliberate self-harm should be given a comprehensive psychiatric assessment. Mental health services should be organized to make this possible, and where possible for it to take place in the emergency department. The key management approach includes coordination between the medical and mental health teams.***

It is essential that every patient has a complete assessment and mental health services should be organized to make this possible. There is evidence that patients

not assessed have higher rates of repetition and completed suicide [III]<sup>15</sup> and that hospitals that use this approach can demonstrate that this is cost-effective.<sup>16</sup>

***Regardless of whether their role is short-term or long-term, health professionals should aim to form a therapeutic relationship, respecting the patient's predicament and seeking to understand the problems they have.***

### Conducting the comprehensive assessment

A comprehensive assessment will not be complete until the patient's cognitive function has returned to normal; in particular, following an overdose of medications that can impair cognition. The patient interview should be conducted in a secure environment and there is a need to balance privacy, dignity and security considerations for patient safety [V].

As a minimum, it should include initial and ongoing assessment of mental state, detection of mental disorders; and assessment of risk of harm to self and others. This should include:

- eliciting any thoughts and plans about further self-harm;
- the detailed review of current and past episodes of self-harm behaviour;
- assessment of the patient's current social circumstances, and any alternative means of dealing with ongoing stressors; and
- assessment of current psychosocial stressors and available support from others.

Clinicians should also follow policy and procedures advised by their employing organization where these policies are current and appropriate.

***Eliciting guarantees of safety from the patient or developing 'no self-harm contracts' are not sufficient as sole management strategies and are not recommended.***

Numerous risk assessment protocols for measuring suicidal risk have been evaluated. These facilitate clinician recall of the domains of risk to cover and those recommended by local hospital policy should be completed clearly in the patient's file, either in free text as a semistructured form. Even with validated risk assessment tools, no single tool is sufficient and assessment efficacy remains a problem.

***Clinicians should not rely upon one risk assessment protocol as a sole management strategy. Clinical judgement and effectively engaging the patient is the mainstay of providing quality care to a highly distressed person. Any documented risk assessment form completed should, however, be placed in the patient's notes.***

## GENERAL MANAGEMENT ISSUES

### Acute management

Key medico-legal considerations include:

- assessing 'competence' of the patient for providing informed consent to treatment;
- facilitating informed consent;
- ensuring clinician knowledge about appropriate mental health legislation;
- ensuring 'duty of care' for patient safety during episodes of care and during transfer to other settings; and
- attending to concerns about confidentiality (risks to safety mean that confidentiality cannot be preserved, but the patient should be consulted wherever possible regarding what is said, and to whom).

Hospital protocols should specify lines of responsibility and how to access senior medical clinicians for assessment, second opinions and treatment planning. These protocols should ensure that support is provided to family members. These should translate into routine care where there is explicit reporting of follow-up responsibilities between specialist mental health care, inpatient and outpatient facilities and discharge if appropriate, to primary care.

### Ongoing care

Identifying and treating underlying mental disorders where present is the mainstay of preventing or reducing the severity of future self-harm. Patients may appear to reject help from health professionals and may be difficult to engage. Many will not return for appointments. Dysfunctional coping styles and chaotic help-seeking by some of these patients can result in therapist transference and counter-transference issues being a potential barrier to patient recovery.<sup>17</sup> Its management is a core clinical skill. Long-term treatment availability requires that those clinicians willing and skilled in this form of treatment be identified.

***Clinicians need to develop appropriate strategies for support that could include supervision, peer discussion and training specific to the management of patients who self-harm.***

***Clinicians should assess the extent to which family members and significant others, where appropriate, can act as treatment allies particularly where there is a risk for suicide. A high index of suspicion for suicide is always prudent and helping carers manage this risk is essential.***

## CURRENT TREATMENT EVIDENCE

The goals of specialized multidisciplinary mental health services provided to patients following self-harm are to increase the patient's resourcefulness

and positive coping, to prevent repeat episodes or habituation, to reduce distress to patients and relatives and to prevent suicide. For those few patients with habitual self-harm, it aims to prolong the period between episodes of self-harm and reduce injury severity.

***Patients should be informed of the evidence-based treatment approaches appropriate to their care.***

***Treatment should be delivered in an atmosphere of optimism for recovery from any present mental disorder, and of optimism that change toward positive problem-solving and coping styles can be achieved.***

Any present mental disorders should be treated according to recognized evidence-based treatment guidelines, including other titles in the Royal Australian and New Zealand College of Psychiatrists (RANZCP) guideline series. Treatment planning should be collaborative with the patient and take into account patient preferences. Both psychological and pharmacological treatments have been evaluated. The following is an evidence summary concerning treatments evaluated to reduce self-harm specifically and are synthesized into six key practice recommendations.

### 1. Ensure prompt access to emergency department

The key issue is service management within emergency departments for prioritizing the medical and psychiatric assessment of patients presenting with deliberate self-harm. A clinical practice guideline (CPG) exists on this topic specifically to address presentations by young people, as do policies in most Australian and New Zealand jurisdictions (see comprehensive guideline).

The use of a crisis access card ('green card') containing referral information and intended to aid continuity of access to a therapist, has been evaluated by two randomized controlled trials (RCTs) in the UK. Both showed non-significant reduction of self-harm in the intervention arms of the trials.<sup>18,19</sup> An Australian study (which was not peer-reviewed) is more optimistic.<sup>20</sup> Their role is to aid treatment compliance and they should not be viewed as a 'treatment' or sole management strategy. They may be unhelpful for repeat presenters [II].

### 2. Ensure prompt access to mental health assessment

All patients presenting to an emergency department following an episode of deliberate self-harm should have a comprehensive mental health assessment. This assessment should be conducted by a properly trained health professional, ideally a mental health professional. The minimum requirements for the assessment have been described in the section on conducting the comprehensive assessment.



*Psychiatric services within emergency departments are being used in Australia to overcome problems of delayed assessment upon presentation.*

*A general management principle is to assist entry of the patient to mental health services in a streamlined and well-organized intake process that is known to all medical and non-medical disciplines within the health service.*

### **3. Encourage treatment engagement and follow-up attendance**

Few published studies have focused upon what works to engage adults who self-harm in treatment and to attend follow up. Brief interpersonal psychodynamic therapy (IPT) has improved compliance and satisfaction with treatment.<sup>21</sup> Trials have evaluated intensive after-care and outreach and report inconclusive findings [I].<sup>22</sup> Limited assertive outreach has been evaluated, including studies in primary care using postal invitations for consultations by general practitioners after discharge of patients from hospital following self-harm, also with inconclusive results [II].<sup>23</sup> It remains essential to engage the patient for assessment of risk and to detect potential mental health problems and psychosocial disadvantage or distress that is amenable to change.

*Clinicians should take into account usual standards for culturally sensitive engagement with patients after self-harm from Maori, Pacific Islander, Aboriginal and Torres Strait Islander and other cultural or age groups.*

### **4. Teach new coping and problem-solving skills**

When compared to standard after-care, the following therapies have been found to be useful in reducing some of the morbidity associated with deliberate self-harm: problem-solving therapy;<sup>24</sup> interpersonal problem-solving [I];<sup>25</sup> cognitive-behaviour therapy (CBT) for repeat suicide attempts;<sup>26</sup> and manual assisted cognitive therapy (MACT).<sup>27</sup> Dialectical behaviour therapy (DBT) [II] has been shown to reduce self-harm for patients with multiple episodes and borderline personality disorder patients.<sup>28</sup> Meta-analysis of these cognitive orientated therapies show that they reported non-significant reduction in self-harm in intervention groups, concluding that they should be considered promising but not of proven effectiveness.<sup>29</sup>

### **5. Treat underlying mental disorders in those who self-harm**

#### ***Patients with mood disorders***

Limited evidence is available on the role of antidepressants and antipsychotics, and there is reported caution about the role of anxiolytic medications for reducing self-harm specifically. Tricyclic antidepressants, although effective for managing depression, are

not recommended for patients at risk for self-harm due to safety in overdose concerns. Selective serotonin reuptake inhibitors (SSRIs) are thereby recommended for most patients. The SSRIs are indicated only if the patient is currently depressed. In general, treat depression assertively and exercise caution about the potential lethality of any prescribed medications.

Considerable evidence exists for lithium, other mood stabilizers and anticonvulsants for patients with bipolar disorder, 15–20% of whom die by suicide (see bipolar disorder CPG). A meta-analysis of 12 studies on antisuicidal properties of lithium indicates it has a protective benefit.<sup>30</sup> Lithium's mechanism for reducing self-harm remains debated, some suggesting that it may treat underlying excitability while others conclude that it is unclear that it has independent antisuicide properties, other than reducing depressive symptoms.

Electroconvulsive therapy (ECT) has long been used for treatment-resistant depression, psychotic depression and schizophrenia and, in particular, has been reported to reduce acute suicide risk. A recent Institute of Medicine review concludes that only short-term efficacy on suicide rate reduction and suicidal behaviour has ever been reported.<sup>3</sup>

#### ***Patients with schizophrenia and other psychotic disorders***

A multicentre, randomized international trial comparing atypical antipsychotics recently reported that clozapine reduced repeat self-harm in hospitalized patients with past self-harm histories when compared with olanzapine.<sup>31</sup> Patients had schizophrenia and schizoaffective disorder and all in the trial were seen weekly for 6 months and biweekly for 18 months. Findings support four earlier studies<sup>32,33</sup> although the latter were concerned with treatment resistance rather than exclusively deliberate self-harm outcomes.

#### ***Patients with personality traits and disorders***

Dialectical behaviour therapy has been shown to reduce self-harm in patients with borderline personality disorder and histories of multiple self-harm episodes.

#### ***Patients with alcohol and substance misuse***

*The management of comorbidity underpins much clinical management of deliberate self-harm. Comprehensive assessment includes the assessment of substance misuse and/or addiction, and treatment planning should ensure management or referral for management of substance misuse issues.*

### **6. Avoid approaches where there is evidence of harmful effects**

There is caution in the literature about contracting people not to self-harm because this approach may be applied unskillfully, or it may be over-relied upon as a sole management strategy.

Those with childhood trauma have been shown in a before and after study that the diagnoses of multiple personality disorder and the use of recovered memory treatment increased self-harm [III-3].<sup>34</sup>

## CONCLUSION

Our review confirms previous findings that there are promising but no proven superior therapies for reducing deliberate self-harm in all patient groups. However, this is a highly diverse population and further research on specific subgroups is needed. An evidence base is emerging for reducing risk in some clinical subgroups and in how to engage patients in treatment and reduce their distress by better service organization and responsiveness. The role of hospitalization is discussed in detail in the comprehensive version. We found no reports evaluating the role of patient-targeted CPGs in this population.

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