

# Suicidality: prevention, detection and intervention

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**SUMMARY**

Australian suicide rates are increasing. GPs have a key role in the early detection and management of suicidality and the treatment of commonly associated mood disorders and substance misuse.

Drugs are indicated for moderate to severe depression. They can also be considered for patients who have been unable to access, do not want or have not responded to psychological treatments.

Selective serotonin reuptake inhibitors are less toxic than serotonin noradrenaline reuptake inhibitors. Tricyclic antidepressants are the most dangerous in overdose. Mood stabilising drugs can be prescribed, but in large quantities they are dangerous in overdose.

In depressed adolescents psychological therapies are first-line treatments. When drugs are indicated, in older people selective serotonin reuptake inhibitors are generally well tolerated, but paroxetine and fluoxetine are best avoided.

**Introduction**

Suicide accounts for 1.4% of all deaths worldwide.<sup>1,2</sup> In Australia, suicide is the leading cause of death among those aged 16–24 years, while the suicide rates in men aged over 85 years are the highest for any age group.<sup>3</sup> In 2015, 3027 Australians died by suicide, more than the national road toll.<sup>3</sup> In 2006 the death rate from suicide was 10.2 per 100 000 people. This rose to 12.6 per 100 000 in 2015.<sup>3</sup> For every death by suicide, around 25 people will attempt suicide<sup>4</sup> and many more will engage in non-suicidal self-injury (such as self-cutting). Self-injury is associated with a greater likelihood of suicidal thoughts and behaviours.<sup>5</sup>

**Prevention**

Suicide results from a convergence of genetic, biological, psychological, social and cultural factors often combined with an experience of trauma and loss.<sup>1</sup> Despite the rising toll, suicide is still a comparatively rare event. Given the complexity of its causation, it is unsurprising that no single suicide prevention strategy clearly stands out above the others.<sup>1,2</sup> These facts also explain the counterintuitive finding that no single risk factor that is statistically significantly associated with an increase in suicide – such as a history of self-harm or depressed mood – provides any practical assistance in predicting which particular patients might take their own life.<sup>1,6,7</sup> Prevention strategies therefore need to be multifactorial and tailored to the individual patient.

There are suicide risk assessment tools, but these should be used as guides only and not as replacements for clinical decision making.<sup>8,9</sup>

Suicide prevention is most likely to be effective if a combination of evidenced-based strategies are used both at the individual and population levels.<sup>1,4</sup>

One of the strongest evidence-based strategies for suicide prevention is the education of primary care clinicians.<sup>10</sup> In Australia, GPs are the most frequent providers of mental health care and many patients who attempt suicide visit their GP in the preceding months.<sup>11</sup> This makes GPs well placed to help reduce the rate of suicide. Doctors should remember that a therapeutic relationship can be protective.<sup>12–14</sup>

**The approach to the suicidal patient**

Most suicidal patients will be distressed and many will feel stigmatised and ashamed. Clinicians should offer comfort, reassurance and hope, and avoid judgement.<sup>15</sup> When a patient admits to suicidal thoughts or behaviour, understanding their predicament begins with an exploration of these phenomena (Box 1). This includes the nature of the thoughts or behaviours, any plans, previous suicide attempts and access to means of harm, for example firearms, poisons, and medicines that are dangerous in overdose such as quetiapine, opioids and tricyclic antidepressants. The clinician should then review the circumstances that might be contributing to the patient's suicidality (Box 2).

Management plans should be negotiated with the patient. In most cases family, friends or other psychosocial supports should be involved.<sup>15</sup>

A key element of any management plan will be to consider the least restrictive environment for safely starting treatment. Most patients can be managed

in the community. However, if in doubt (because, for example, the burden of stressors threatens to overwhelm the patient, or if psychosocial supports are unavailable), obtaining a second opinion about whether hospitalisation is necessary through the local acute mental health team, or the emergency department, is sound clinical practice. Patients whose severe depression or psychotic symptoms make them unable to cooperate with community treatment can be compelled to have such an assessment under mental health legislation.

All management plans include reinforcement of protective factors including the involvement of family and friends where possible, provision of emergency contacts, formulation of an individualised self-care plan and encouragement to avoid alcohol and other substances (which increase impulsivity). Every suicidal patient should be seen at least weekly until the acute crisis resolves. Good communication between care providers is essential.

**Substance use and depression**

Substance misuse (especially alcohol) is a common method of self-medication for depression and anxiety, but it increases the likelihood of suicidal behaviour. The patient’s substance use must be explored in the assessment and addressed in the management plan.

Patients should be encouraged to stop drinking alcohol. Motivational interviewing is the first-line intervention for alcohol misuse. Many online treatments for depression (such as MyCompass

at [www.mycompass.org.au](http://www.mycompass.org.au)) use motivational interviewing principles to help people begin to address substance misuse. Several online treatments specifically for alcohol misuse are currently being developed and evaluated including Shade ([www.shadetreatment.com](http://www.shadetreatment.com)), Daybreak, Hello Sunday Morning ([www.hellosundaymorning.org](http://www.hellosundaymorning.org)) and OnTrack Alcohol and Depression ([www.ontrack.org.au](http://www.ontrack.org.au)).

**Early intervention in depression**

Patients appreciate their GP asking about their mental health, although they may not volunteer psychological symptoms. Consider psychological causes when patients present with physical symptoms that are trivial or for which no underlying cause is evident, especially when there is no positive response to reassurance. GPs should be alert to body language or other cues suggesting an underlying mood disorder.

Around 5% of adults will experience an episode of major depressive disorder each year.<sup>16</sup> GPs who wish to assess patients for the symptoms and severity of depression (and associated anxiety) may use well-validated, self-report scales such as the Patient Health Questionnaire (PHQ-9) or the Generalised Anxiety Disorder 7 (GAD7).<sup>17-19</sup> The Patient Health Questionnaire includes a question regarding suicidality which can be a useful springboard for further discussion.<sup>20</sup>

Early and successful treatment can significantly reduce the length and severity of episodes of depression and associated suicidal thoughts or behaviour. Patients with mild-moderate depression will often respond to psychological therapies. These include cognitive behaviour therapy or interpersonal psychotherapy and may be delivered face-to-face, or via self-guided or clinician-assisted evidence-based

**Box 1 Questions to assess a patient’s suicidality**

- Tell me about your thoughts of suicide – what goes through your mind?
- How long have you had these thoughts?
- How often do you have them?
- Do you find it hard to push these thoughts away?
- Do you think you would carry out these thoughts?
- Have you made any plans to suicide? If so, what are they? (Consider access to especially lethal means, such as firearms, medicines or hanging).
- Have you ever tried to commit suicide in the past? If so, what happened?
- Who is important to you? Do they know how you have been feeling?
- If you could change a couple of things in your life, what would they be?
- Do you have any ideas, things that you may have tried in the past, that could help you feel differently/better?
- How can I help?

**Box 2 Factors contributing to suicidal thoughts**

- Bereavement
- Relationship problems
- Non-adherence to treatment
- Increased alcohol or other drug use or established dependence
- Depressive illness
- Other existing mental illnesses (recent discharge from a psychiatric unit is a time of higher risk)
- Chronic pain or physical illness
- History of severe psychological trauma
- Loss of hope
- Loss of support

e-mental health interventions (Box 3). Patients with moderate–severe depression are likely to also require antidepressants as may those who have not benefited from psychological therapies or cannot or do not want to access them.<sup>20</sup>

### Psychological therapy

There is much evidence that psychological therapies can reduce suicidality and promote well-being in all age groups and across a range of diagnoses including depression, bipolar disorder, schizophrenia and borderline personality disorder.<sup>1</sup>

In adolescents, multisystem and family-based treatments are effective.<sup>1</sup> Family-focused interventions are invariably necessary in the treatment of the depressed adolescent. These may include psycho-education and support for parents, family therapy or the treatment of mental illness in a parent. School-based interventions focusing on mental health literacy, suicide risk awareness and skills training (in dealing with adverse life events and stress) can reduce suicidal thinking and attempts, including at 12-month follow-up.<sup>1</sup>

Ongoing collaborative care, especially involving specialist mental health and primary healthcare services, has been shown to be feasible, acceptable and effective in reducing suicidal ideation compared to standard care in the general adult population. Similar programs for depressed and suicidal older patients are also effective.<sup>1</sup>

### Choosing an antidepressant

The choice of antidepressant must consider individual patient factors such as age (Box 4<sup>21,22</sup> and Box 5). It is also guided by efficacy, tolerability, the prominence of certain symptoms, the depressive subtype, adverse effects, the potential for drug–drug interactions and the drug's safety in overdose.

### Suicidality

There is no specific drug for preventing suicide, although antidepressants reduce the intensity of suicidal thoughts over time in depressed patients. It has been suggested that antidepressants could increase the risk of suicide, but this is unlikely (Box 6).<sup>20,23–30</sup>

### Danger in overdose

Tricyclic antidepressants, particularly dothiepin, are the most dangerous of the antidepressants in overdose, followed by serotonin noradrenaline reuptake inhibitors (desvenlafaxine is less toxic than venlafaxine) and then others such as mirtazapine. Selective serotonin reuptake inhibitors are the least dangerous, although citalopram and escitalopram have a significant risk of seizures and QT prolongation<sup>31</sup> and fluoxetine has a long half-life.

### Box 3 Examples of e-mental health interventions

myCompass – free, with a pre-registration overview  
[www.mycompass.org.au](http://www.mycompass.org.au)

This Way Up – registration and a small fee are required  
<https://thiswayup.org.au>

MindSpot – free, GP referral required  
[www.mindspot.org.au](http://www.mindspot.org.au)

### Box 4 Antidepressants for adolescent depression

Fluoxetine is recommended by National Institute for Health and Care Excellence (UK) and Beyond Blue for the treatment of depression in young people when psychological therapies (such as cognitive behaviour therapy or interpersonal psychotherapy) are refused, unavailable, or ineffective, and when symptoms are severe.<sup>21,22</sup>

Starting fluoxetine (or another selective serotonin reuptake inhibitor) can cause a temporary increase in anxiety or agitation which may be associated with an increase in suicidal ideation or self-harming behaviour.

While unwanted effects can be minimised with a 'start low, go slow' dosing strategy, young people and their families should be warned of a possible increase in suicidality when starting antidepressants. They should be encouraged to report this immediately to their parents, or their doctor.

Fluoxetine has a long half-life and can therefore be ceased abruptly if required.

Young patients starting an antidepressant should be seen at least weekly until the severity and suicidality, if present, are no longer of clinical concern.

If suicidal patients require an antidepressant, we recommend using a drug which is less toxic and that only a week's supply be prescribed (or dispensed) at a time.

### Mood stabilisers

Lithium can significantly reduce the incidence of suicide attempts and completed suicide in patients with major mood disorders, compared to those not treated with lithium.<sup>16,32</sup>

Lithium, valproate, carbamazepine and lamotrigine are dangerous in overdose and lethal quantities may be available on a single prescription.

### Antipsychotics

Clozapine has been reported to be more effective than olanzapine in the treatment of suicidality in patients with schizophrenia and schizoaffective disorder.<sup>33</sup>

**Box 5 Antidepressants for suicidal older people**

People in late life are more likely to have chronic physical illness, experience pain, be isolated and be bereaved, all of which contribute to suicidality. Depression in older people is undertreated and the incidence of suicide is high.

The choice of antidepressant should be based on the optimal adverse effect profile and the risk of drug-drug interactions. Due to the metabolic changes of ageing, older patients are at a greater risk of potentially fatal toxicity and drug-drug interactions when they deliberately or inadvertently take larger quantities of antidepressants.

Most of the selective serotonin reuptake inhibitors (SSRIs) and mirtazapine, moclobemide and desvenlafaxine are relatively safe in older people. Having fewer anticholinergic effects than other antidepressants, these drugs are well tolerated by patients with cardiovascular disease and are less likely to impair cognition, cause constipation or lead to urinary retention.

When considering SSRIs avoid paroxetine which has the most anticholinergic adverse effects and fluoxetine which has a long half-life.

**Box 6 Do antidepressant drugs cause suicide?**

A meta-analysis of trial data submitted to the US Food and Drug Administration (FDA) confirmed that suicidal behaviour did not differ between those taking placebo and those taking antidepressants.<sup>23</sup>

There is strong evidence that the risk of suicide is highest in the month before starting an antidepressant, declines quickly during the first week of treatment, and steadily decreases to even lower, stable rates with continued treatment.<sup>24</sup>

A number of epidemiological studies over the last several decades have shown an inverse relationship between the number of prescriptions for antidepressants and the frequency of suicides.<sup>25</sup>

The FDA black box warning in 2004 cautioned prescribers about an increase in suicidal thinking and behaviour (although not successful suicides) in young people prescribed antidepressants. However subsequently several studies<sup>26-28</sup> have shown an inverse relation between successful suicide and antidepressant prescribing in this age group.

Overall, in children and adolescents with depression, the evidence does not support avoiding antidepressants because of an increased risk of suicidal behaviour. The Treatment for Adolescents with Depression Study found that cognitive behaviour therapy plus fluoxetine might lead to less suicidal ideation and behaviour than just fluoxetine alone.<sup>29,30</sup>

Source: Adapted from reference 20

**Conclusion**

For depression and substance misuse, psychological therapies and drugs are key components of treatment. Drugs are especially important for moderate to severe depression. With an empathic approach and awareness of which drugs are most efficacious, tolerable and least dangerous in overdose, GPs are well placed to intervene early to prevent or reduce suicide. ◀

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**SELF-TEST QUESTIONS**

True or false?

- Antidepressants increase the rate of suicide in severely depressed adolescents.
- Lithium reduces the risk of suicide in patients with mood disorders.

Answers on page 203

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