How to Treat Quiz

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NEED TO KNOW

Low engagement with health-care services remains a challenge in suicide intervention among children and adolescents.

Suicide in youths may be driven by different psychological/neuropsychological mechanisms (eg, emotion dysregulation and impulsivity) compared with adults.

It is important to work collaboratively with the family and any other significant people in the young person's life.

GPs play a key role in integrating multiple and cross-disciplinary resources for the patient.

Suicidality in children and adolescents

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INTRODUCTION

SUICIDE is a tragedy that affects not only the individual victim but also families, friends, communities and society as a whole; it is the leading cause of death among individuals aged 15-24 years in Australia.[1] The total economic cost of youth suicide in Australia is estimated at $22 billion a year.[2] Despite significant efforts and government investment, the suicide rate remains unchanged and is even increasing in some groups of individuals, such as the Indigenous populations.[3] To lower the suicide rate, we need to improve both prevention and intervention strategies.

GPs play a key role as first-line responders to suicidal crisis. Although a proper and timely triage protocol is a priority, GPs also provide aftercare following the acute or intensive interventions. There is a need, therefore, to raise awareness about the often-intertwined youth suicide prevention and intervention strategies to de-escalate the recurrent/ongoing suicide risk. A good understanding of various care pathways, including hospital, community and school-based mental health services, is also critical. In addition, knowledge of the unique neuropsychological features in young people may hold the key to insightful clinical information questioning and individualised treatment planning.

This How to Treat offers an overview of factors associated with suicide in children/adolescents and aims to provide evidence-based suggestions for the management of suicide in young people.

AETIOLOGY

CAUSES of suicide are complex and involve biological, psychological and social (environmental) factors. Aetiology is often heterogeneous and triggered by combinations of biopsychosocial risk factors or cascading events in a person's life. Protective factors include early healthcare support, connectedness with family and community, self-worth and self-esteem and personal, religious or cultural beliefs against suicide. These factors also interact in unique ways (for example, different sequences) that may vary with demographics, making risk assessment challenging.

Biological factors

Biological factors associated with suicide have been studied using neuroimaging, genetics and immunological studies, among others. A growing body of literature on neuroimaging has implicated brain regions that subserve emotion and impulse regulation such as the ventral prefrontal cortex and dorsal prefrontal cortex, among several other brain regions (see figures 1 and 2).[4] These regions and their connections play a role in the excessive negative as well as blunted positive internal states that can stimulate suicidal ideation, with the dysregulated co-ordination between ventral prefrontal cortex and dorsal prefrontal cortex considered to weaken top-down inhibition of maladaptive behaviours and inflexible decision-making and planning – resulting in progression of suicidal ideation to lethal behaviours.[4] Differences in dorsal prefrontal cortex responses have also been linked to processing of negative emotional stimuli, highlighting the importance of dysregulated processing of negative emotions and in particular specific emotions (for example, passive viewing of angry faces, but not happy faces) as well as impulse disinhibition in youth suicidal ideation or attempts.[5,6]

While genome-wide association studies are inconclusive, several variants in the serotonin transporter gene (5-HTT or solute carrier family 6 member 4 [SLC6A4]), the tryptophan hydroxylase 1 gene (TPH1), the gene encoding brain-derived neurotrophic factor (BDNF) and its receptor neurotrophic receptor tyrosine kinase 2 (NTRK2), have all been implicated, although with contradictory findings.[7,8] The SLC6A4 and TPH1 genes encode key proteins in the metabolism of serotonin, a neurotransmitter closely related to depressive disorders – the most commonly associated mental illness.

Epigenetic phenomena, such as DNA methylation levels, may reflect environmental exposure, such as childhood maltreatment/trauma, with a recent meta-analysis suggesting methylation changes are independent of comorbid psychiatric disorders.[9,10] Further, genes related to other psychiatric conditions, such as BDNF and GABAAα1 genes, may moderate the suicide risk via changes in methylation patterns.[11-13]

Psychological factors

Mental health issues, and in particular substance use, may predispose to suicidality through disinhibition, impulsiveness and impaired judgement.[14] However, no substantial reduction in suicide despite the decrease in alcohol drinking in the young age group implies that the role of alcohol consumption is smaller in adolescents compared with adults.[15,16] However, 57% of Australian adolescents or young adults who died of suicide having had mental health disorders underscores the importance of treating mental illnesses.[17]

A growing body of literature indicates that suicides in adolescents are more likely to be attributable to responses to acute stress than suicides in adults with a strong link to post-traumatic stress disorder.[18-23] Emotion dysregulation, predisposing to poor impulse control, triggered by acute stress and negative peer experience are also critical in adolescent suicide.[24-26]

Socio-demographic factors

Suicide is more common in males, while non-fatal suicide attempts are more common among females – with rural residence, poverty and some evidence of the role of migration reported in increasing the suicide risk.[27-39]

EPIDEMIOLOGY

THE prevalence rate of suicidal ideation or attempts of children and adolescents vary by geographic region: Germany – suicide attempts 7.6%, lifetime prevalence 36.6%; US – lifetime prevalence of suicide ideation 12.1%, plans 4.0%, attempts 4.1%; China – lifetime prevalence male:female for ideation 17.6:23.5%, plans 8.9-10.7% and attempts 3.4:4.6%.[39-41]

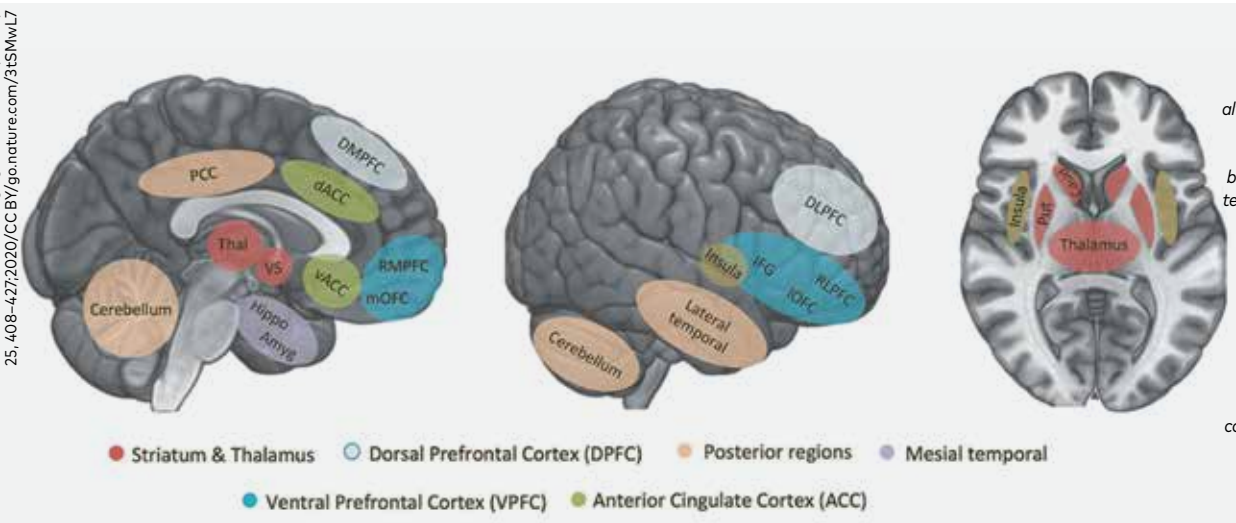
The second Australian Child and Adolescent Survey of Mental Health and Wellbeing on 41,400, 12-17 year-olds found that in any 12-month period, the prevalence of suicide attempt was 2.4%, suicidal ideation 7.5%, plans 5.2%, attempts 3.2% (1.3% multiple attempts) but only 0.6% had received treatment.[42] A National Coronial Information System retrospective evaluation found that fewer than one-third had received mental health care at the time of their deaths.[17] These findings suggest that reducing barriers to accessing first-line service providers, such as GPs, needs to be prioritised.

ASSESSMENT AND DIAGNOSIS

YOUNG people presenting with suicidal ideation and behaviour will benefit from a sensitive, caring, non-intrusive and non-judgemental assessment approach. It is also important to consider the developmental capacity of the young person. This includes their understanding of the concept of death and its permanency, as well as their belief system. Those who are not able to verbally express their feelings might benefit from drawing or writing or use of play-based exploration. Assessing the level of comprehension is also important as is taking into consideration the young person's understanding of the lethality or consequences of their behaviour. For example, a young person may take five or 10 tablets of paracetamol thinking that it is enough to cause serious harm, while another may take 50 thinking it will not cause much harm (see figure 3). Additional factors such as cognitive capacity are critical considerations for safety planning. Where necessary, it is important to use simple language and ensure that the young person has understood the safety plan while also involving the parent/carer with detailed instructions and role playing of de-escalation strategies.

It is important to work collaboratively with the family and any other significant people in the young person's life. However, the young person's response style or honesty about the risk severity may be influenced by the presence of family members during assessment. Thus, it is important to give the young person the opportunity to discuss any concerns privately and confidentially. This will need to include any personal, sexual or cultural identity issues and relationship difficulties including social or online issues. Equally, limits of confidentiality and the need to breach confidentiality in situations where the safety of the young person is at risk will need to be discussed. Where relevant, it is important to clarify what information will be shared, under which circumstances and with whom.

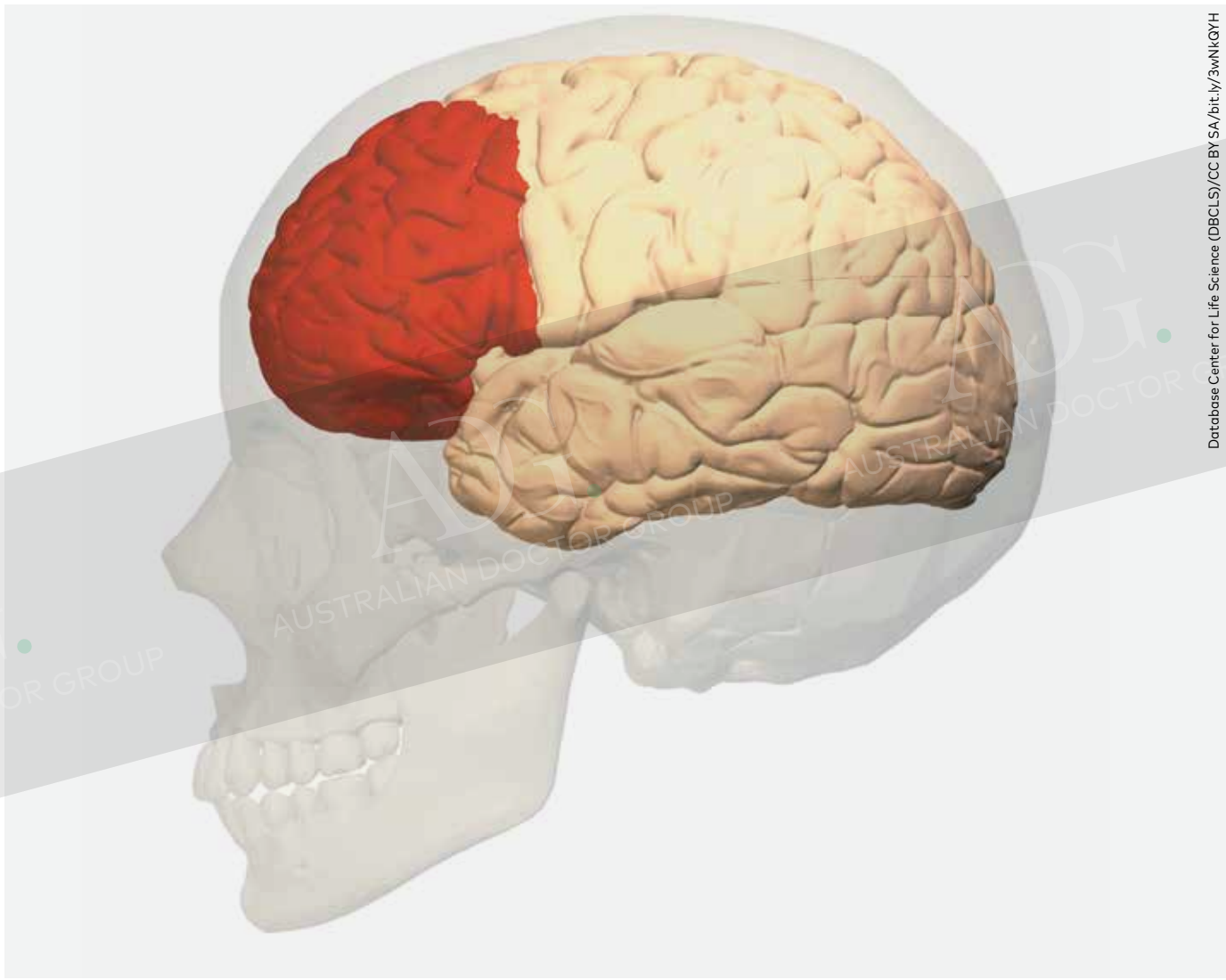
Also assess the mental health and physical health, including any medical conditions or medications that are being taken by the patient. Thus, a combination of interviewing the patient and the family/carers separately and together as well as obtaining independent collateral information from school, friends or any other relevant professionals is critical. The SUICIDE framework (see table 1) outlines the key aspects that require careful exploration.



Schmaal L., et al. Imaging suicidal thoughts and behaviors: a comprehensive review of 2 decades of neuroimaging studies. *Mol Psychiatry* 25, 408–427;2020/CC BY/go.nature.com/3tSMwL7

These brain regions have been most reported in neuroimaging studies investigating structural, functional, and molecular brain alterations associated with suicidal thoughts and behaviours, with a subset of regions grouped more broadly into ventral prefrontal cortex, dorsal prefrontal cortex, insula, mesial temporal, subcortical, and posterior regions. DMPFC=dorsomedial prefrontal cortex, dACC=dorsal anterior cingulate cortex, RMPFC=rostromedial prefrontal cortex, mOFC=medial orbitofrontal cortex, vACC=ventral anterior cingulate cortex, PCC=posterior cingulate cortex, Thal=thalamus, VS=ventral striatum, Hippo=hippocampus, Amyg=amygdala, DLPFC=dorsolateral prefrontal cortex, RLPFC=rostrolateral prefrontal cortex, IFG=inferior frontal gyrus, lOFC=lateral orbitofrontal cortex, Put=putamen, Caud=caudate.

Figure 1. Overview of brain regions evaluated in studies investigating suicidal ideation.



Database Center for Life Science (DBCLS)/CC BY SA/bit.ly/3wNkQYH

Figure 2. Prefrontal cortex of left cerebral hemisphere (shown in red).

Figure 3. A young person may take five or 10 tablets of paracetamol thinking that it is enough to cause serious harm, while another may take 50 thinking it will not cause much harm.

Severity Measure for Depression—Child Age 11–17*

*PHQ-9 modified for Adolescents (PHQ-A)—Adapted

Name:_____ **Age:** _____ **Sex: Male** ❑ **Female** ❑ **Date:**_____

Instructions: How often have you been bothered by each of the following symptoms during the past **7 days**? For each symptom put an "**X**" in the box beneath the answer that best describes how you have been feeling.

						Clinician Use
						Item score
		(0) Not at all	(1) Several days	(2) More than half the days	(3) Nearly every day	
1.	Feeling down, depressed, irritable, or hopeless?					
2.	Little interest or pleasure in doing things?					
3.	Trouble falling asleep, staying asleep, or sleeping too much?					
4.	Poor appetite, weight loss, or overeating?					
5.	Feeling tired, or having little energy?					
6.	Feeling bad about yourself—or feeling that you are a failure, or that you have let yourself or your family down?					
7.	Trouble concentrating on things like school work, reading, or watching TV?					
8.	Moving or speaking so slowly that other people could have noticed? Or the opposite—being so fidgety or restless that you were moving around a lot more than usual?					
9.	Thoughts that you would be better off dead, or of hurting yourself in some way?					
					Total/Partial Raw Score:	
					Prorated Total Raw Score: (if 1-2 items left unanswered)	

Modified from the PHQ-A (J. Johnson, 2002) for research and evaluation purposes

Each item on the measure is rated on a 4-point scale (0=Not at all; 1=Several days; 2=More than half the days; and 3=Nearly every day).
The raw scores on the nine items should be summed to obtain a total raw score and should be interpreted using this table:

Total Raw Score	Severity of depressive disorder or episode
0-4	None
5-9	Mild
10-14	Moderate
15-19	Moderately severe
20-27	Severe

If three or more items are left unanswered, the total raw score on the measure should not be used. Use this measure:

$$\frac{(\text{Raw sum} \times 9)}{\text{Number of items that were actually answered}}$$

Figure 4.Modified Patient Health Questionnaire-9.

Table 1. Key assessment characteristics

Assessment characteristic	Key considerations
Social and contextual factors	Recent loss/separation, setbacks/disappointments; bullying; identity or social (including social media) issues; family stressors; history of trauma or abuse; presence of any positive supports, their capacity, willingness and availability as relevant
Under the influence	Drug or alcohol use may increase suicidal ideation/behaviour
Intent	Detailed planning, meaning and motivation, leaving a note or making a goodbye call or social media post, taking precautions such as choosing a time and place to avoid discovery, not seeking help and continued desire to end life after the event, choosing a method with high lethality are all factors that suggest high intent and serious risk
Conduct disorder or other behavioural disturbances	Conduct disorder and disruptive behaviours may increase the risk
Impulsivity or other personality characteristics	Higher levels of impulsive/risk taking behaviours are known to increase the likelihood of suicidal behaviours
Depression or other underlying mental health issues	Depression is the most common cause of suicidal ideation and behaviour At risk mental states include anxiety, depressive cognition, eg, hopelessness, helplessness, self-blame, guilt; ongoing wish to die; psychotic symptoms; personal or family history of depression or other mental health disorders in first degree relatives including family history of suicide
Ever before	Previous suicidal ideation or attempts increases the risk

Source: Eapen V et al 2012[43]

Box 1. Further questions

- **Suicidal ideas:**
  - The presence of death wishes; the frequency, duration, strength and any obsessional quality of suicidal ideation; whether the ideas/urges can be controlled; and any suicidal images, sounds or other sensory experiences (the latter being relevant post-trauma and post-suicide attempts, one's own or others).
- **Suicidal plans:**
  - Strength of suicidal intent (self-rated); any plan (note level of detail), beliefs about finality and lethality; research, rehearsals (notes, equipment, practising) and likelihood of rescue.
- **Suicidal means:**
  - Availability, dangerousness, ease of procurement.
- **Post-suicide attempt:**
  - In addition to the above, one also considers:
    - Lethality and intent: high medical lethality attempts are associated with high suicide risk; however low lethality attempts may conceal high intent where knowledge of method lethality is limited (eg, in younger children); and low intent attempts can become lethal with a lethal method.

Screening for suicidality and self-harm

The belief that questioning youth about suicidal ideas and behaviour induces suicidal ideas or behaviour has no empirical basis.[44] It is important to broach the topic calmly and non-judgementally. Such questioning is best embedded in the interview, in the context of depression and anxiety screening. An example of this is the widely used Patient Health Questionnaire-9 (PHQ-9, see figure 4), which has been modified for teens and for Aboriginal patients. Depending on the responses, ask further questions (see box 1).

The wish to die strongly predicts future attempts, as does courage and competence about self-harm and previous worst-point resolved plans and preparations. Rehearsal, preventing discovery and communication beforehand are also important suicide predictors. Expecting repetition also predicts recurrent suicide attempts. Impulsivity and substance misuse combine to further increase the risk.

MANAGEMENT

The continuum of suicidality

ADOLESCENT self-harm comprises a spectrum from suicidal ideation and non-suicidal self-injury, to suicide attempts, to suicide. Self-harm behaviours (see figure 5) may have a suicidal component or none and in individuals this continuum of behaviours may co-occur and suicidal intent may fluctuate, but there is a definite link between self-harm and increased risk for suicide attempts and suicide.[45] Group self-harm and suicide attempt clinical profiles also overlap: earlier onset and longer duration of self-harm pose increased risk for suicide attempts in adolescents; while ▸

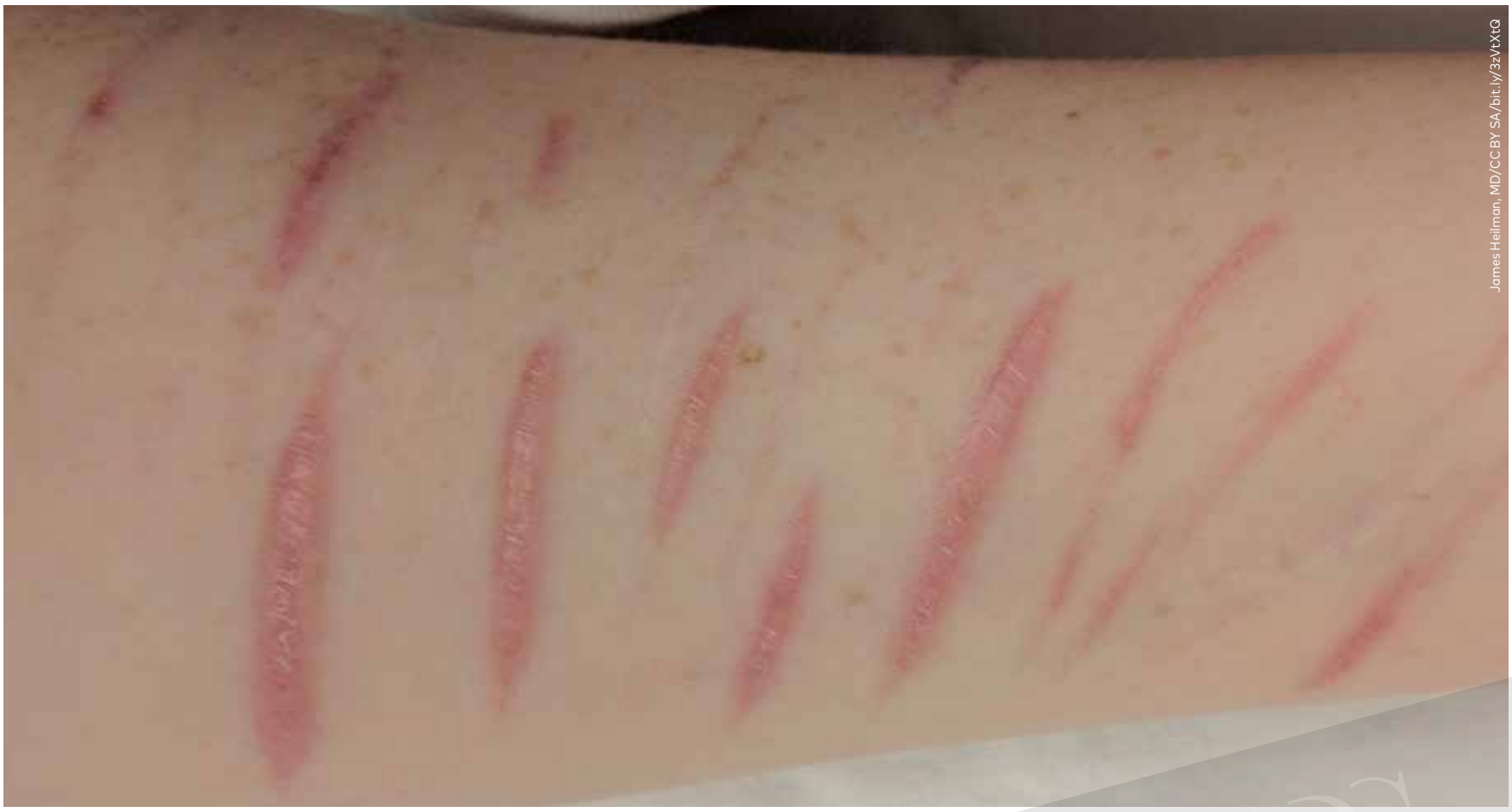


Figure 5. Healed scars from a prior self-harm.

◂ concurrent self-harm and mood disorders do the same for suicide attempts in adults. Those hospitalised with medically serious suicide attempts constitute the minority of clinical presentations, with most patients managed in the community, after (often) hospital-based mental health review and medical treatment.[46]

However, most adolescent suicidal behaviours remain unknown to clinical services.[47] These behaviours occur in relation to common mental health problems (for example, anxiety, depression and eating disorders) and stressful life events, including academic and exam pressures, problematic family relationships or conflicts, separation/loss, offline and/or online bullying and peer pressure, caring for loved ones with physical/mental disabilities and abuse/trauma.[48]

GPs' pivotal role

GPs can have key roles in detecting emergent suicidal ideation or non-suicidal self-injury, assessing and managing acutely suicidal youth, referral to specialist care and aftercare support following suicide attempts. While GPs are enablers to self-harming youth to access help, they may feel unprepared, with practical and resourcing problems challenging their effectiveness (see later). Although time-poor, GPs offer the advantage of avoiding the stigma of mental health issues while providing holistic patient care.[49]

GPs also may encounter, and through their informed awareness, be positioned to address community myths about suicide that complicate help-seeking. These include assumptions that asking questions or talking about suicide with children and adolescents will increase the probability of its occurrence, that those who talk about it will not do it and that intervention is fruitless once an individual decides to complete suicide.[50] Avoiding direct questioning of young people about suicidal ideas or behaviour has no empirical basis.[44] Suicidal intent fluctuates, particularly with young people, where impulsivity and substance abuse co-occur with suicidal behaviour. There is also often a misunderstanding of the overlaps and the differences between different forms of self-harm (non-suicidal self-injury and suicidality), which can result in panic or draconian responses by schools and families.

Supportive organisational cultures, practices and terminologies

Safety in managing suicidality includes effective supportive organisational protocols and policies and culture regarding suicidal behaviours. Pressures that detract from careful listening (for example, organisational demands for quick processing, obsessive reliance on checklists) require identification and modification or resistance.

Suicide attempts elevate future suicide risk and suicide attempt survivors want a sustained helpful relationship. Interpersonal and systemic factors in EDs often prevent effective intervention. Youth suicide attempters' aversive experiences often thwart their engagement and preparedness to return in future suicidal crises, thereby increasing reattempt risks.[51,52] Such experiences can be mitigated by staff training.[52]

GPs' receipt of information about suicidal behaviours and their unique positioning means that they are 'interested parties' who have a valuable role. Even if mental health staff undertake the primary follow-up, GPs, whatever their confidence about mental health, may approach their patients or be approached to offer support.

In caring for suicidal people, some terminologies are acceptable while others have been or should be phased out. These include deliberate self-harm (though the term 'intentional self-harm' is used in ICD-10); parasuicide, 'failed attempt' and suicide gesture; and the often-used phrases 'completed' suicide (suicide does not fulfil or make things complete) or 'committed suicide' (suicide is not a crime).

Creating and sustaining engagement at assessment and follow-up

Content and process are both important in assessment.[53] Assessment aims to minimise foreseeable risk, diagnose and treat underlying conditions and mobilise strengths and supports. Assessment also aims to engage the patient, enable shared understanding of the problem and management, while providing a sense of containment and hope.

The young person is preferably interviewed alone in a quiet, safe and well-provided environment. Listening carefully and attentively to the narrative/story helps create trust, equality and reliable information.

Cognitive analytic therapy, a time-limited collaborative program for considering how a person thinks, feels and acts and underlying events and relationships (often from childhood or earlier in life[54]) underpins therapeutic assessment, which is a brief intervention designed to increase treatment engagement of adolescents with self-harm.[55] Therapeutic assessment seems to increase adherence with subsequent treatment compared with usual care.[47]

Where patients are non-forthcoming, barriers to trust need attention: for example, the mode of referral and consent for treatment; language/communication difficulties; confidentiality concerns; and negative beliefs or experiences. These include stigma and/or adverse experiences regarding mental health problems and services and/or fear of not being taken seriously or treated respectfully. Survivors and service users define what matters: active listening, respect, non-pejorative language, flexibility, continuity and engendering hope, plus the clinician recognising the meaning of the behaviours.[56] It is important to understand the overlaps and the differences between non-suicidal self-injury and suicidality. Nevertheless, confidentiality cannot be absolute if safety is at stake. But one may distinguish session detail and medical opinions, determine collaboratively what responsible adults need to hear, and gain permission to obtain a collaborative history. Confidentiality may be more 'watertight' for those aged over 16 years.

Re-referral and hospitalisation

Indications for more intensive psychiatric care, such as (re-)referral for mental health care and/or hospitalisation are listed in box 2.[57]

Box 2. Indications for more intensive psychiatric care

- High lethality (medically serious) suicide attempt.
- Suicide attempt involving preparation, concealment or belief that the attempt would be serious.
- Ongoing (pressing) suicidal thoughts, wishes, intentions, plans.
- Inability to openly and honestly discuss the suicide attempt.
- Inability to discuss safety planning.
- History of past suicide attempts.
- Escalating suicidal actions.
- Lack of alternatives for adequate monitoring and treatment.
- Psychiatric disorders (eg, unipolar major depression, bipolar disorder, psychotic disorders, or substance use disorders), underlying suicidal ideation and behaviour.
- Agitation.
- Impulsivity.
- Severe hopelessness.
- Poor social support.

Does hospitalisation prevent suicide?

Although clinicians admit some suicidal young people to hospital, outpatient follow-up is more common.[46] Inpatient psychiatric care is generally associated with very high suicide risk in the months post-attempt and post-discharge.[58] Debate exists regarding the source of such risk: evidence is still insufficient to decide whether this depends on the patient populations' high pre-existing risk, or traumatic experiences/exposures in (some) psychiatric hospitals, or in problematic aftercare.[58] The latter two categories are understudied: young people involuntary hospitalised often have a negative view of their experience, become unlikely to share their suicidal states with treating staff and report reduced likelihood of openness in future encounters.[59] As key contacts, GPs have an important potential role in engaging young people leaving psychiatric hospitals (and ED post-suicide attempt), evaluating their suicide risk status, listening to their experiences and connecting them to treatments.

Documentation

From a medicolegal viewpoint, evidence pertaining to risk should be collected, contemporaneously documented and evaluated, and standards of care must be reasonable and prudent. In Australia, current national data sets cannot easily identify suicidal behaviours or their treatments; a potential solution is to co-create the medical record with the young person and have primary care and medical records staff trained for consistent recording.[56]

Addressing acute risk and safety planning

Safety planning involves working with the patient and those close to them to marshal and combine strategies to address risk and maximise the patient's wellbeing (see figure 6). The value of addressing factors to mitigate suicidal risk, such as sobriety, healthy sleep and promotion of positive affect, is understudied.[60] The Beyond Now suicide safety plan app provides one example; the strategies can be collaboratively listed and these solutions tested with one's GP (see table 2).

Effective treatments

PSYCHOTHERAPIES

These are first-line treatment for depressive disorders in children and adolescents.

Various psychological and social interventions demonstrably work for suicidal youth. A selection of these is briefly described.

Notably, all these programs typically involve families and extend over at least several months. However, with the possible exception of dialectical behaviour therapy, where some state health departments

PAGE 20 ▸

Figure 6. It is important to work collaboratively with the family and any other significant people in the young person's life.

◂ PAGE 18 have initiated public outreach, such as Project Air, none is widely available.

Dialectical behaviour therapy

This is well-known and has strong supporting empirical evidence. Dialectical behaviour therapy adapts CBT, augmenting its reason-based, change-directed approaches with acceptance and emotion management skills. It teaches mindfulness, distress tolerance, emotion regulation and interpersonal effectiveness (in individual and group formats). Multi-study evidence shows it works with borderline personality disorder, youth suicidal behaviours and self-harm (and other indications).[61]

Attachment-based family therapy

This interpersonal psychotherapy aims to mend damaged attachments, restore trust and security in the parent-child relationship and promote adolescent autonomy and reduce suicidal ideation.[62]

Mentalisation-based therapy

Mentalisation-based therapy focuses on improving the adolescent and family's ability to infer thoughts and feelings from actions, which is believed to then enhance affect regulation and self-control and empirically reduces self-harm, depression and borderline behaviours.[63]

Integrated-CBT

Integrated-CBT augments standard CBT with motivational interviewing to address substance use and family involvement over parent-child communication, monitoring, crisis management and problem-solving. It demonstrably reduces suicide attempts, substance abuse, arrests and re-hospitalisations.[64] In the Youth-Nominated Support Team-Version II study, youth post-suicide attempt with suicidal thoughts or behaviour nominate adults who then receive psychoeducation, listen, help problem-solve, collaboratively encourage healthy behaviours and are supported themselves. This reduces patients' suicidal ideation and may reduce all-cause mortality over protracted periods.[65]

Table 2. Principles of safety planning

Activities	Details
Safety planning with the patient	• Identify warning signs and triggers of a worsening mental state (eg, social withdrawal) • Restrict access to means; suicide methods can always be found by those determined to use them, but faced by ambivalence about suicide and youth impulsivity and substance-affected mental states, restriction of collaborative methods buys time • Avoid recreational substances as they facilitate impulsivity and/or suicidal behaviours • Consider self-care; coping strategies and healthy activities such as making positive behavioural choices; acceptance of anxiety (self and family) • Key places and people with whom to connect (family, friends, professionals; school, community, emergency professional contacts), including connecting to aftercare programs where possible (eg, the Way Back Support Service of Beyond Blue); peer support workers, brief therapies • Consider reasons for living, values • Attend mental health follow-up early and ensure treatment adherence (medications, appointments)
Safety planning with the patient's family and friends	• Ensure that medications are taken, appointments are made/kept, remove sources of harm, undertake pleasant events, keep routines going, avoid conflict, recognise that a level of anxiety is normal, get help for oneself • Identify effective modes of communication • List emergency professional contacts

Box 3. Themes identified by GPs in their management of suicidal behaviours

- Training needs.
- Communication challenges (especially between primary care and mental health teams, EDs and child and adolescent mental health services).
- Service provision, for example, the need for single-point contact for key workers sharing information across services.
- Nurse, counselling or psychology key workers attached to services and/or dedicated primary care self-harm services.
- Shortage of alternative self-harm and support services, patient liaison and community services, in-practice self-harm services and counsellors who speak minority languages.
- The need for co-produced clinical guidelines.

Source: Mughal F et al 2020[74]

The resourceful adolescent parent program

The Resourceful Adolescent Parent Program, a strengths-based parent program, educates parents about adolescent suicidal and self-injurious behaviour, prevention strategies and accessing services; discusses parent strengths and stress management; reviews normal adolescent development, self-esteem promotion and balancing individuation and attachment; and examines strategies to promote family cohesion and manage conflict. There is evidence that it improves suicidal ideation, self-harm and suicidal behaviour and also functioning.[66]

PSYCHOPHARMACOLOGY

There are no specific psychopharmacological treatments for suicidal youth. However, antidepressants, particularly SSRIs, SNRIs, or other new generation antidepressants are widely used to treat underlying psychiatric conditions: for example, clinical depression, anxiety and obsessive compulsive disorder in young people.

SPECIFIC POPULATIONS

INDIGENOUS SUICIDE PREVENTION

INDIGENOUS youth suicide rates are treble those of the non-Indigenous population.[67] Addressing this involves GPs having awareness of Indigenous cultural, settlement and family histories and of Indigenous suicide prevention resources and tools (such as the iBobbly app[68]); listening carefully, training and screening for suicidal ideation and identifying referral pathways.

RURAL AND REMOTE

Rural areas have higher suicide rates, fewer mental health services and GPs, challenges regarding confidentiality, traditionally more self-reliance and more firearms.[69] Telehealth, initiatives like the Rural Adversity Mental Health Program of the Centre for Rural and Remote Mental Health and government initiatives to lure doctors and nurses to rural, regional/remote areas by slashing university debt may help bridge these gaps.

CULTURALLY AND LINGUISTICALLY DIVERSE POPULATIONS

Suicide may be over-represented among some culturally and linguistically diverse groups, for example refugee and conflict-affected populations, in which stigma may affect reporting.[70] It is important for GPs to consider the interpretation of mental health problems in non-Western cultures and responses to suicidal behaviour especially among some older people, as well as intergenerational differences in cultural experience and orientation (with the younger generation being bicultural).[50] Working with interpreters can be complex and requires training.[71]

LGBTIQ POPULATIONS

LGBTIQ people have higher rates of mental ill-health and suicide or suicidal behaviours and face barriers to accessing services, due to structural (including legislative) and everyday experiences of discrimination, stigma and resultant trauma. A recent study indicated that 37.2% reported suicidal ideation and 3.9% a suicide attempt within 12 months in Australia. These findings underscore the importance of culturally-safe suicide prevention programs as well as addressing the issue of marginalisation for this group.[72]

What GPs say they need to support suicidal teens

Themes that GPs identify in their management of suicidal behaviours are listed in box 3.

Training on suicide prevention in primary care enhanced by practising interviewing in simulated, standardised patient interactions PAGE 22 ▸

◂PAGE 20 (face-to-face and telehealth) is under investigation.[73]

PROGNOSIS

RECURRENT self-harm behaviours among adolescents are common, with 15-25% of adolescents treated in hospitals returning for treatment within 12 months.[16,46] For adolescents treated in hospital, over a third will repeat suicidal attempts within 12 months.[75,76] When certain mental health issues, such as borderline personality disorder, are superimposed on suicidal incidents, a substantially higher rate of repeated attempts occur. Three quarters of adolescents with borderline personality disorder are found to have suicidal attempts and they also exhibit higher rates of extreme levels of self-harm than do adults with borderline personality disorder.[77] Adolescents with prior suicide attempts may have higher school dropout rates and lower scores on educational indicators than their peers.[78] Self-harm behaviours during adolescence may predict more adversity in later life; males are more likely to be affected than females in terms of unemployment and family-related issues.[79]

THE FUTURE

The knowledge about risk factors from research over five decades has not been sufficiently translated into success in reducing suicide rates.[80] This 'knowledge-to-practice' gap may suggest the need to revisit and scrutinise existing approaches. Using the SUICIDE principle in the assessment to identify predisposing, precipitating, perpetuating and protective factors for suicide should be part of the GP-based management guidelines for children/adolescents with suicidal ideation or attempts. Specifically, factors that predict short-term or even immediate risks such as recent changes in psychiatric symptoms or acute stressful life events require actionable strategies to address immediate needs. Therefore, collaboration between GPs and other first-line responders is important to identify and modify these proximal risk factors. Helping the patient navigate through various types of hospital-based, school-based and community-based mental health services, is imperative.

CASE STUDY

GEORGE, 17, lives with his parents and older brother, a university student. George presents to the local ED following a near fatal suicidal attempt via carbon monoxide poisoning. On the morning of the attempt, he had a school assignment due that he was struggling to complete. In the early morning hours, he went to his mother's car that was parked on the side of the road and attempted suicide. He was found by passers-by who called an ambulance.

There is no prior history or diagnosis of mental illness, although he was seen briefly two years ago by the school counsellor following self-harm by lacerating his arm.

He reports experiencing low mood for the past two years, but during the recent COVID-19 lockdown his mental state deteriorated and his sleep-wake cycle reversed. He used to perform well academically but has now fallen behind, which is a major stressor for him. He has a couple of close friends and gives a history of being bullied from the beginning of high school, although denies any recent issues. He reports a decrease in appetite, low motivation and energy and emergence of suicidal ideation over the past two months, with detailed planning of the attempt for the past few weeks. He had researched different methods and had decided on and purchased the equipment necessary for carrying out his plan. George denies any history of substance use and he has never been romantically involved with anyone. Although there is no history of childhood trauma or abuse, he describes significant parental marital conflict from when he was a young boy and reported that his father had recently left home (2-3 weeks before his admission). George denies that this conflict is causing him distress as he says he is used to his dad leaving home intermittently following fights with his mum.

Self-harm behaviours during adolescence may predict more adversity in later life.

George is admitted to the adolescent mental health unit given the high suicidal risk in the context of a diagnosis of a major depression. Initially he is very upset that the attempt had failed. On assessment he appears to be disengaged but speaks in a low tone with brief answers.

He is started on fluoxetine and receives CBT for depression. A detailed safety plan is agreed on. Family meetings provide psychoeducation regarding depression and its management, including the safety plan and strategies to address any future distress. The impact of the marital conflict on George's mental state is discussed as is the importance of providing emotional safety for George to discuss his feelings openly with his family. Over the course of the seven-day admission, his sleep-wake cycle improves and he returns to having a routine to his day. His mood improves and he becomes bright and reactive, interacting well with staff and other patients. He is discharged to the care of the community mental health team. His allocated case manager continues CBT sessions and communication with the school counsellor ensures continuity of care and support at school as well. When reviewed in the clinic six weeks post-discharge he is maintaining the symptom improvement.

This case highlights the importance of timely intense intervention for a suicide attempt as well as the need to identify and address any underlying mental illness and the biopsychosocial precipitating and perpetuating factors.

CONCLUSION

THE prevalence of suicidal ideation and attempts in children and adolescents is underestimated since a proportion do not access mental health services. This highlights the need for first-line responders, including GPs, to identify suicidal behaviours and associated risk factors and provide aftercare. Psychological mechanisms underlying self-harm or suicidal behaviours in children and adolescents are more likely to arise from emotional dysregulation in response to stress; this occurs because the neurobiological features in children and adolescents are distinct from those in adults.

A good understanding of unique risk and protective factors for youth suicide is thus critically important in the assessment and management. Engagement of families and friends also plays a key role in safety planning. Suicide prevention and intervention for children and adolescents require a collaborative effort and GPs can act as a key liaison to connect various stakeholders while also assisting the co-ordination of different services over the course of recovery.

RESOURCES

- **PHQ-9: Modified for Teens**
  bit.ly/36bvij7
- **PHQ-9: Modified for Aboriginal people**
  bit.ly/3GTz3Gw
- **Beyond Blue**
  - **Beyond Now suicide safety plan app**
    bit.ly/390SEtD
  - **The Way Back Support Service**
    bit.ly/3rTCIju
- **Project Air**
  bit.ly/3sMDL43
- **Black Dog Institute iBobbly app**
  bit.ly/3LHk2LA
- **National Rural Health Alliance: Suicide in rural and remote Australia**
  bit.ly/3s44RVn
- **Rural Adversity Mental Health Program**
  bit.ly/3uWqo4a
- **Suicide Prevention Australia: Fact sheet: Suicidality among culturally and linguistically diverse communities 2021**
  bit.ly/3Jw7S6D
- **Suicide Prevention Australia: Fact sheet: LGBTIQ+ suicide prevention 2021**
  bit.ly/33wqvrO
- **Cornell Research Program on Self-injury and Recovery: The relationship between non-suicidal self-injury and suicide**
  bit.ly/3tZJYdp

References

Available on request from howtotreat@adg.com.au

How to Treat Quiz.

SUICIDALITY IN CHILDREN AND ADOLESCENTS

GO ONLINE TO COMPLETE THE QUIZ **ausdoc.com.au/howtotreat**

1. **Which THREE socio-demographic factors may increase the risk of suicide?**
   - **a** Poverty.
   - **b** Female.
   - **c** Rural residence.
   - **d** Migration.

2. **Which THREE psychological factors may predispose to suicidality in children and adolescents?**
   - **a** Mental health issues.
   - **b** Acute stress.
   - **c** Close-knit peer group.
   - **d** Poor impulse control.

3. **Which TWO are important in the assessment of suicidality in children and adolescents?**
   - **a** A judgemental assessment approach.
   - **b** Considering their understanding of the concept of death and its permanency.
   - **c** Relying solely on the information provided by the young person.
   - **d** Working collaboratively with the family and any other significant people in the young person's life.

4. **Which ONE is not an area to explore screening for suicidality and self-harm?**
   - **a** Suicidal ideas.
   - **b** Suicide history in the family.
   - **c** Suicidal plans.
   - **d** Post-suicide attempt.

5. **Which TWO statements regarding the management of suicidality are correct?**
   - **a** There is no link between self-harm and increased risk for suicide attempts and suicide.
   - **b** Suicide attempts elevate future suicide risk.
   - **c** Therapeutic assessment offers no benefit over usual care.
   - **d** Interpersonal and systemic factors in EDs often prevent effective intervention.

6. **Which THREE are indications for more intensive psychiatric care?**
   - **a** First suicide attempt.
   - **b** Ongoing (pressing) suicidal thoughts, wishes, intentions, plans.
   - **c** Psychiatric disorders underlying suicidal ideation and behaviour.
   - **d** Lack of alternatives for adequate monitoring and treatment.

7. **Which TWO modalities are appropriate in managing suicidality in children and adolescents?**
   - **a** Safety planning.
   - **b** Prolonged hospitalisation.
   - **c** Avoid school attendance.
   - **d** Psychotherapy.

8. **Which THREE are features of safety planning with the patient's family and friends?**
   - **a** Identify warning signs and triggers of a worsening mental state.
   - **b** Identify effective modes of communication.
   - **c** Emergency professional contacts.
   - **d** Remove sources of harm.

9. **Which THREE statements regarding suicidality in children and adolescents in specific populations are correct?**
   - **a** Rural areas have higher suicide rates.
   - **b** Indigenous youth suicide rates are double those of the non-Indigenous population.
   - **c** Stigma may affect reporting in some culturally and linguistically diverse groups.
   - **d** LGBTIQ people face barriers to accessing services.

10. **Which THREE statements regarding the prognosis in suicidality in children and adolescents are correct?**
    - **a** Recurrent self-harm behaviours among adolescents are common.
    - **b** When certain mental health issues are superimposed on suicidal incidents, a substantially higher rate of repeated attempts occur.
    - **c** Women who self-harm during adolescence have higher rates of later life family-related issues than do men.
    - **d** Adolescents with prior suicide attempts may have higher school dropout rates and lower scores on educational indicators than their peers.

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