

Adolescent self-harm and suicide attempts in the emergency department in Singapore

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The youth mental health crisis has taken centre stage globally in recent years with increased reporting of young persons suffering from mental health problems and mental illnesses. Singapore is not spared. The COVID-19 pandemic has been largely blamed for the onset of the mental health crisis due to its disruptive effects on the young persons' lives. Circuit breaker or lockdown measures, movement restrictions and social isolation may have led to exacerbations of pre-existing mental health conditions and delays in seeking treatments, further fueling the mental health crisis. A systematic review by Jones et al. reported evidence on the potential negative impact of the pandemic on adolescent mental health.¹ The uncertainty of the future, spanning worries about the new pandemic to that of climate change, also weighed heavily on young minds. Additionally, excessive and unrestricted use of the internet and social media has been identified as having a strong association with poor mental health and suicide attempts among the young,² due to the mechanism of harm such as cybervictimisation, accessibility to harmful online content, and social media serving as an "echo chamber" that reinforces maladaptive behaviours such as self-harm and suicide. The interplay of these and other psychosocial factors may have led to elevated distress among children and adolescents.³

During the COVID-19 pandemic, there was a surge in adolescents seeking emergency assistance for depression, self-harm and suicide attempts.³ In Singapore, between the period of 2020 and 2021, an increase in requests in mental health services and hospitalisations for mental health reasons were reported,⁴ mirroring overseas reports of surges in emergency attendances for suicidal behaviours in young persons aged 12 and above.^{3,5}

In this issue of the *Annals*, Chong et al. aptly bring readers' attention to self-harm and suicidal behaviours in Singapore during the pandemic.⁶ The authors collected data from January to December 2021, and studied the sociodemographic profile and suicidal behaviours of 221 adolescents who

presented to a paediatric hospital emergency department (ED). There was a higher proportion of females (85.5%) than males (14.5%) who attempted suicide or engaged in self-harm behaviour. The mean age was the same for both sexes. Differences in methods chosen between sexes were noted, with a higher proportion of males compared to females with suicidal intent (46.% versus [vs] 33.3%) and males adopting more lethal methods like jumping from heights to end their lives. A significantly higher proportion of females presented with intentional paracetamol overdose compared to males (46.6% vs 28.1%). The most common method of suicide attempt was through intentional drug overdose with majority using paracetamol followed by psychotropic drugs (in patients on existing treatment for mental disorders). It is important to appreciate the difference in suicide risk between the 2 sexes. Despite both having common risk factors of suicidal behaviours, such as previous mental or substance abuse disorder and exposure to interpersonal violence, clinicians should be cognisant of female-specific mental health risk factors, such as having severe mood disorders, eating disorders and post-traumatic stress disorder, while males were more likely to have received diagnoses of disruptive behavioural disorders and conduct problems.⁷

The most common mental health issue noted in this current paper was stress-related and emotional coping difficulties (e.g. acute stress reaction, emotional dysregulation and maladaptive coping), followed by mood and anxiety difficulties (e.g. major depressive disorder and anxiety disorder). Slightly more than a quarter of the subjects had both emotional coping and mood problems. In many studies on suicidal behaviours,⁸ a history of past suicide or self-harm attempt confers a high risk for subsequent attempts. Hence besides asking about past suicide attempts, Carballo et al. suggested that attending physicians should look out for factors that appear to increase the risk of suicidality: psychological factors (depression, anxiety, previous suicide attempt,

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drug and alcohol use and other comorbid psychiatric disorders); stressful life events (family problems and peer conflicts); and personality traits (neuroticism and impulsivity).⁹ Impulsivity, lack of foreplanning and unfavourable decision-making are frequent characteristics observed in adolescents who engage in self-harm. Studies have suggested that non-suicidal self-injury is associated with neurocognitive impulsivity, especially in the presence of a history of abuse, depression or post-traumatic stress disorder.¹⁰ More frequent and recent self-harm behaviours were also reported to be occurring in negative emotional contexts, such as perceived or actual criticisms in close relationships.¹¹ Trait impulsivity and catastrophic thinking could therefore be a target for interventions like cognitive behavioural therapy and mindfulness practices.

Of interest is this paper's finding that in the 1 year prior to some of the adolescents' suicide or self-harm attempt, 19.5% of them had presented to a hospital ED or polyclinic in the healthcare cluster at least once for a medically unexplained symptom which could possibly be due to somatisation, and 15.4% had sought healthcare for common mild illnesses like upper respiratory tract infection or gastroenteritis. This means that there could be opportunities for healthcare professionals in a primary health setting to ask more about their adolescent patients' emotional and mental well-being while attending to their medical ailments.

In busy medical clinics or EDs, it can be difficult to perform a thorough psychosocial and mental health screen. Eliciting psychological and emotional symptoms can be even more daunting if the healthcare worker is inexperienced. Clinicians are not necessarily trained to be sensitive to the psychosocial circumstances of young persons and to how adverse psychosocial factors could predispose them to self-harm or attempt suicide. The Home, Education, Activities, Drugs, Sexuality, Suicidality, Safety (HEADSSS) assessment tool used in this present paper is an easy-to-perform face-to-face interview that could be used by a junior doctor, resident, allied health staff or nurse.¹² Based on the verbatim responses, the medical team would be in a better position to make a referral to a child psychiatrist, a psychologist or a medical social worker. For medical staff who do not know how to approach a teen with self-harm, the use of a structured interview in addition to the HEADSSS tool to elicit psychosocial factors and suicide intentions can come in handy. The Pediatric Symptom Checklist is another good and brief screening questionnaire used by pediatricians and other health professionals to improve the

recognition and treatment of psychosocial problems in children.¹³

The study's finding that home conflicts feature highly as a psychosocial risk factor, with many adolescents experiencing parent-child problems and parental conflict, indicates that inclusion of a family assessment by the medical social worker or referral to social services (e.g. family service centre or social service agency) may help to address the ongoing stressors that the adolescents experience at home, thereby reducing the risk of self-harm. Similarly, if school- and academic-related stress plays a significant role in contributing to self-harm behaviours, consultation liaison with the school's senior management and counsellor would be most appropriate.

Suicide research is still very much in its infancy in Singapore and needs to be encouraged and developed. The evidence to date highlights the complex nature of suicidal behaviours and how such behaviours are often a result of the interaction of various psychosocial factors together. Research can help us form an aetiological understanding on individual mechanisms, and aid in the development of suitable interventions and short-term prediction models by integrating research findings.¹⁴ With so much more still to be understood regarding the complexities of suicidal and self-harm behaviours, the findings of this study should spur the community, schools, clinicians and researchers towards cognisance of its predictive factors for early intervention and further research.

Ethics statement

Not applicable.

Declaration

The author declares he has no affiliations or financial involvement with any commercial organisation with a direct financial interest in the subject or materials discussed in the manuscript.

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