Editorial

# Managing Suicide Ideation: A Targeted Approach

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## Introduction

Suicide, the deliberate act to end one's life, has been described as the "result of fractures with oneself".[1] It could manifest as a direct consequence of psychiatric illness—such as severe depression with an overwhelming sense of hopelessness—or a compliant act under the influence of a command hallucination in psychotic illnesses. However, suicides can also occur in the absence of any known prior psychiatric disorders, but in the presence of "profound distress and psychological pain that has become unbearable … suicide is seen as the perfect solution".[2]

In recent years, suicide has become the leading cause of death in those aged between 10 and 29. In 2018, 397 lives were lost to suicide in Singapore alone and men accounted for 71% of completed suicides. The number of suicides also rose by 10% to 8.36 individuals in 100,000 Singapore residents. More alarmingly, suicide in male youths reached a peak in 27 years. According to the non-profit suicide prevention organisation, Samaritans of Singapore, "There are 2.8 times more deaths from suicide than transport accidents in 2018. For every suicide, at least 6 suicide survivors are left behind."[3]

Suicide prevention remains a priority in public health. To raise awareness of the importance of suicide prevention, the International Association for Suicide Prevention and the World Health Organization (WHO) have designated September 10 of each year as World Suicide Prevention Day. For many healthcare professionals, the prospect of working with suicidal patients can pose a great challenge since it can engender in them feelings of anxiety and a sense of helplessness and ineffectiveness.[4]

Suicide ideation is described as thoughts of ending one's life and marks the start of a continuum that progresses to suicide planning and, eventually, suicide. This continuum could be arrested or mitigated at each stage when targeted intervention is carried out successfully.

A survey of 21 countries by WHO had found that suicide ideation (thought of self-harm) was relatively common with a 12-month prevalence of approximately 2%[5] and a lifetime prevalence of 9%.[6] It was especially prevalent in individuals who had experienced hopelessness when they were under severe distress triggered by adjustment disorder, major life event stressors, depression, major psychiatric conditions, personality disorders or chronic illnesses (with or without chronic pain).

A cross-national study of suicide risks, suicide plans and suicide attempts had shown a strong association between suicide ideation and suicide plans and attempts.[6] In individuals with a history of suicide ideation, the probability of making a suicide plan and suicide attempt was approximately 33% and 30%, respectively. For those who had a history of suicide ideation and suicide planning, the probability of an attempted suicide was approximately 55%. Among those without a suicide plan, the likelihood of attempted suicide was only 15%. About 60% of participants in the study who transitioned from suicide ideation to suicide plan and attempted suicide occurred within the first year after onset of suicide ideation. These findings underscore the urgent need for careful assessment of suicide risk and early intervention in suicide ideation, especially during the first year upon onset of the latter.[6]

## A Targeted Approach to Treat Suicide Ideation

*Early Recognition and Identification: Mental Health Literacy*

The mental health literacy of a population has been shown to correlate with the mental wellness of a community and the efficacy of its suicide prevention efforts.[7,8] When family members and peers are able to identify and recognise individuals who have suicide ideation and suicidal plans, they can help to refer them to mental health experts based at primary care medical facilities, social service agencies and emergency units in hospitals for immediate assessment and intervention.

During assessment and intervention, a careful and empathetic assessment of the individual's overall mental and physical health, social support, history of alcohol and substance abuse and use of prescription medicines that could trigger suicidal ideas could be made.

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*Safety Containment, Legislation and Psychological First Aid*

When there is a high risk of an individual with limited family or social support acting out with severe suicide ideation, the need for safe containment and early treatment in a mental health facility is often necessitated after consent has been given. In the absence of any consent that can be given, the Mental Health (Care and Treatment) Act has made provision for affected individuals to be removed to such facilities for treatment.[9] These measures provide time and an opportunity for mental health practitioners to carry out timely intervention and effect treatment to mitigate the risk of suicide.

There have been several developments in the treatment of suicide ideation and efforts to increase help-seeking behaviour in at-risk individuals.[10] Current evidence points towards the use of a multi-pronged strategy that comprises medical, psychological and social interventions as an effective means to treat suicide ideation in these individuals.[11]

*Psychotherapy*

Many psychological disorders and symptoms are associated with high levels of emotional dysregulation and increased suicide risk. It is believed that "Deficits in the ability to regulate emotion and inability to withstand negative affect have been implicated in the development of suicidal ideation and suicidality."[1]

Recent evidence has shown that cognitive behavioural therapy[12] and dialectic behavioural therapy[13] could help suicidal patients to explore and process cognitive issues that make them feel suicidal and to learn to manage their emotions and impulses more effectively. In Singapore, both psychotherapies are offered by several private and public healthcare facilities either as stand-alone treatment or as part of a therapeutic framework.

*Pharmacotherapy*

Depending on the underlying psychiatric condition associated with suicide ideation, the use of antidepressants, antianxiety medications and even antipsychotic medicines could help to improve the moods of patients and mitigate their suicide ideation and impulsivity. These drugs act by mediating the harmful effects that emanate from an imbalance in the serotonin, dopamine and noradrenaline pathways. In patients with bipolar and mood disorders, it was reported that the extended use of lithium carbonate could reduce suicide ideation and risk.[14]

Recent clinical trials on the use of ketamine have demonstrated that a single dose of intravenous ketamine infusion—similar to that used in a treatment trial involving patients with major depression—can induce a rapid decline in suicide ideation. In their study on the effect of ketamine use on suicide ideation, Wilkinson et al reported that "Within a day, about 55 percent of individuals who received ketamine no longer had suicidal ideations, compared to 20 percent who received a placebo. This reduction in suicidal ideations lasted for at least seven days."[15]

The encouraging findings on ketamine use have prompted several centres dedicated to the treatment of mood disorders to conduct further trials to evaluate the long-term efficacy and safety of intravenous ketamine administration in emergency and acute suicide care management pathways.[16] A new intranasal ketamine spray is available in the United States and an application for its clinical use in Singapore is currently pending an outcome.

*Neurostimulation Therapy*

As a form of neurostimulation therapy, the effectiveness of electroconvulsive therapy (ECT) to treat severely depressed patients with high suicidal tendencies is well documented. However, negative public perception of ECT has meant that it is reduced to being considered only as a form of contingency treatment. Since it has been shown that "expressed suicidal intent in depressed patients was rapidly relieved with ECT", it was recommended that "evidence-based treatment algorithms for major depressive mood disorders should include dichotomization according to suicide risk, as assessed by interview; and for patients at risk, ECT should be considered earlier than at its conventional 'last resort' position."[17]

Another novel neurostimulation therapy is repetitive transcranial magnetic stimulation (rTMS) that is used to treat depressed patients. The findings on rTMS seemed to suggest that it can also help to lessen suicide ideation.[18] A randomised sham-controlled crossover study that used accelerated intermittent theta-burst stimulation delivered over the left dorsal prefrontal cortex in treatment-resistant depressed patients had shown a reduction in the suicide ideation score over time in both active and sham treatment groups.[19]

## Conclusion

Suicide is a growing issue in public health. There are multiple agencies in the healthcare and social service sectors that continue to provide outreach services to individuals at risk of suicide and self-harm. Consequently, there is a need to develop an integrated and coordinated intervention strategy and therapy programme that involve social service agencies, families, the police and healthcare facilities. It should also incorporate evidence-based interventions that target the root causes of suicide ideation and attempts at self-harm.[20] Additionally, it would strengthen acute management of suicidal individuals in the first year of

presentation which include medical stabilisation, reduction in immediate risk of self-harm, facilitation of early treatment planning, management of underlying medical and psychiatric disorders and case management to monitor at-risk individuals.

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