INVITED ARTICLE

ASSESSMENT OF SUICIDE RISK

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ABSTRACT

Suicide is preventable and the first step in prevention is to identify those who are at risk. The psychiatrically ill are at high risk of suicide. The majority who commit suicide have given clear indications of suicidal intent shortly before the act. In the assessment of suicide risk the precipitating factor, the intensity of suicidal intentions, the patient's motivation for suicide and the lethality of the attempt have to be taken into consideration. Patients with significant suicide risk need to be hospitalized.

Keywords: *Suicide, suicide risk, assessment, pitfalls, suicidal intent.*

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INTRODUCTION

Suicide is not a random and pointless act. In many cases it is seen as a way out of an intolerable situation, a crisis, a problem or difficulty[1]. It is preventable. A first step in prevention is to be able to identify and assess those who are at risk. Studies[2-4] have shown that many people who commit suicide have been in contact with their physicians, psychiatrists or general practitioners shortly before the act.

The type of suicidal patients that are likely to be encountered in clinical practice can be divided into two main groups:

A. Those who have suicidal thoughts.
B. Those who have survived a suicide attempt or who deny being suicidal but behave in such a way as to suggest that they are.

GENERAL ISSUES

Firstly, in assessing suicide risk a doctor must be willing to make inquiries about a patient's suicidal intentions. It is a myth that asking about suicidal inclinations will make suicidal behaviour more likely. One study[2] showed that even though two-thirds of patients who eventually committed suicide had histories of suicide attempts or threats, only two-fifths of the physicians responsible for their care were aware of it. This was true even though the information was available from other sources. Secondly, the doctor must be alert to the general factors that signify an increased risk of suicide. The closer a patient resembles the profile of a typical suicide subject, the higher the risk of suicide. Thirdly, all suicide threats must be taken seriously. There is no truth in the idea that people who talk of suicide will not enact it. Studies[3,5,6] have shown that patients who committed suicide had given warnings of their suicidal intentions. Lastly, the evaluation of the acute risk of suicide is a difficult process even in the hands of experienced psychiatrists[7]. Risk factors only identify those at high risk of suicide. They do not identify those at low risk.

THE INTERVIEW

The goals of the interview are to:

1. Establish sufficient rapport with the patient

It is important to establish a relationship with the patient so that he does not withhold information and will not resist the doctor's interventions later. Morgan, Vassilas and Owen[8] have given an account of the interview technique and the pitfalls in assessing the suicidal patient.

A quiet, uninterrupted setting for the interview is important. The interview has to be carried out in an unhurried manner. The interviewer should seek to convey a sense of warmth, empathy and positive unconditional regard to the patient. The interview is best initiated with open ended non-directive questions that allow the patient to ventilate important issues and feelings. This leads gradually into the topic of suicidal thoughts and intentions.

The questions about suicidal thoughts need not be asked abruptly. One way is to ask, "Have you sometimes thought that life was not worth living?"; "Have you sometimes wished that you were dead?". If the answer is yes then ask, "Have you thought of harming yourself or taking your life?"; "Have you made a suicide attempt?"; "What have you thought of doing?" (suicide plan).

Some of the pitfalls in the assessment of the suicidal patient are:

a. The intensity of suicidal motivation fluctuates and the degree of distress changes even though suicide may be imminent. This results in false improvement and leads to a false sense of security on the part of the doctor. This sense of calm could be due to an attitude of resignation where the patient stops worrying about what to do and leaves everything to chance while still engaging in suicidal behaviour. A false sense of calm may also be found when the patient has made a decision to commit suicide and gains relief from the agony of indecision.
b. Patients who are difficult, angry and resentful may be viewed as deliberate troublemakers by the interviewer instead of being at risk of suicide. Some allowance has to be made for this in the assessment.
c. Patients who repeatedly threaten suicide may be viewed as being manipulative by the doctor rather than being at risk of suicide.

2. Assess the suicidal intent

a. Suicidal thoughts

In those with suicidal thoughts, assessment of the suicidal intent establishes the degree to which the patient intends to act on them. The following factors have to be taken into consideration:

(i) Are the suicidal thoughts active or passive?
(ii) How long have they been present?
(iii) Is there a specific suicide plan?
(iv) How potentially lethal is the plan?
(v) Have previous suicide attempts been made?

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Active suicidal thoughts, suicidal thoughts that are of recent onset or which have shown a recent intensification[5], the presence of a specific suicide plan, the suicide plan that is potentially lethal and a history of previous suicide attempts all point to an increased risk of suicide.

b. Attempted suicide

In those who have made a suicide attempt, assessment of the suicidal intent establishes the seriousness of the act. It is important to reconstruct as fully as possible the events that led up to the attempt. The following factors are taken into consideration:

(i) How dangerous was the method used?
(ii) Did the patient take steps to avoid discovery?
(iii) Did the patient make any attempt to seek help afterwards?
(iv) Was the attempt planned or carried out on impulse?
(v) Was there a 'final act' such as writing a will or a suicide note?

The more potentially lethal the method used, the more thorough the precautions taken against discovery, the absence of any attempt to seek help after the event, the longer and more carefully planned the attempt and the presence of a 'final act' are indicative of high suicidal intent and signify a high risk of fatal repetition.

In assessing patient who have made a suicide attempt, it is important to assess how the patient feels about having survived the attempt; whether he still intends to die; whether the patient was trying to get a message across or had just wanted to die and whether the psychological problems and/or life circumstances that led to the attempt have changed in any way. The absence of relief at being saved, the absence of remorse or regret over the act and the persistence of serious psychological problems and/or life circumstances that led to the attempt all signify a high risk of fatal repetition.

3. Assess the seriousness of any suicide plans

In assessing the seriousness of any suicide plan the following factors are considered:

(i) Has the patient made a detailed plan?
(ii) Are the planned means available and does the patient know how to use it?
(iii) Is the method potentially lethal?
(iv) Did the patient make provisions to be saved?

A serious suicide plan is one in which careful planning has been done, a lethal method is chosen, the means and know-how is available to the patient and no provision is made for rescue or discovery.

4. Assess the patient's views of the future

The patient should be asked about how he views the future. A sense of hopelessness or negative expectations of the future is the link between depression and suicidal behaviour[9-11]. Patients who feel hopeless about their future are at risk of suicide. This holds true for patients suffering from other psychiatric disorders as well.

5. Assess if a psychiatric disorder is present

Studies[3,4,6] have shown that many patients who commit suicide suffer from a psychiatric disorder. The psychiatric disorders that commonly cause suicide are depression, schizophrenia and alcoholism[12]. In patients with depression, whether classified as endogenous or neurotic, 15% will die by suicide; in those with schizophrenia, 10% will die by suicide; and in those with alcoholism, 15% will die by suicide[13]. Panic disorder[14,15] and personality disorder[16] are associated with an increased risk of suicide.

Psychiatric disorders should not be missed as they are treatable and present an opportunity for preventive intervention. Murphy[2] found that the diagnosis of depression was missed by many physicians even though they had recognised depressed mood in their patients.

In the history, the characteristic features of depression should be looked for. These are:

i. A persistent, depressed mood or loss of interest or pleasure in all or nearly all activities but not necessarily the most predominant symptom.
ii. Changes in appetite or weight.
iii. Changes in sleep pattern.
iv. Psychomotor changes.
v. Anhedonia.
vi. Decreased energy.
vii. A sense of worthlessness and guilt.
viii. Reduced ability to think or concentrate.
ix. Suicidal thoughts or thoughts of death.

The history should also be directed to looking for evidence of psychosis and alcoholism. Family and friends may need to be interviewed for more information.

The relevant mental state examination is done to assess if the patient is depressed, psychotic or intoxicated. In the mental state examination one should also look for homicidal ideation especially in patients with psychotic depression. For example, the patient may believe that he is a wicked person and does not deserve to live and then proceed to murder his children so that they do not have to face the world without him, before committing suicide.

Some of the factors that have been associated with increased suicide risk in schizophrenics are being young and male, having a relapsing illness, having been depressed in the past, being currently depressed, having been admitted in the last period of psychiatric contact for depression and suicidal ideas, having recently changed from in-patient to outpatient care and being socially isolated[17,18]. In alcoholics, suicide tends to occur late in the course of the disorder. Most alcoholics who kill themselves are also depressed. The precipitating factor in many cases is an interpersonal loss such as divorce or separation and bereavement[19].

6. Assess the patient's personal and demographic factors for suicide

These risk factors are derived from studies of patients who have committed suicide. The following factors are found in a typical suicide subject and should be noted when taking the history:

a. Age

In general, rates of suicide increase with age. The suicide rate increases sharply from age 50 and the elderly are at greatest risk[4,20].

b. Sex

Males have a higher risk of suicide while females attempt suicide more than males[4,6,21].

c. Race

Chinese and Indians have the highest rates of suicide while the Malays have the lowest[4,6,21].

d. Social factors

People who are socially isolated are at risk of suicide. Married people have lower rates of suicide than the single, widowed or divorced. Interpersonal problems, job problems and social problems are frequent precipitants[4,21,22].

e. *Occupational factors*
Unemployment is a risk factor for suicide[23,24]. The exact nature of this association is still to be elucidated.

f. *Physical illness*
Patients with physical illness that are chronic, painful and disabling are at risk of suicide. Conditions like cancers[25,26] and epilepsy[27,28] have a greater suicide risk.

g. *History of attempted suicide*
Many patients who commit suicide have a history of previous suicide attempts. High suicide risk in this group has been found to be associated with being male, Chinese and suffering from a mental illness[29].

h. *Family history of suicide*
A family history of suicide appears to increase the risk of suicide in other family members when they become mentally ill[30]. The nature of this predisposition is uncertain.

i. *Biological factors*
It has been demonstrated that people who commit suicide have an abnormally low level of cerebral serotonin[31]. This is still in the realm of research but it does suggest that a biological marker for suicide may yet be developed in the future.

7. **Assess what are the patient's current problems and the helpful resources that the patient has**
It is important to identify the problems in the patient's life that have motivated him to attempt suicide or to the contemplation of suicide as a solution. Serious problems that persist increase the risk of suicide. Problems of loneliness, ill health, interpersonal difficulties, unemployment, financial difficulties, legal difficulties, social isolation and other losses such as bereavement should be explored in the assessment as they are common precipitants of suicide.

The type of social support available, the patient's usual way of coping with stress or crisis and the finanical and material resources that are available to the patient have to be assessed. These factors influence the treatment and disposition of the patient.

DECIDING ON THE DISPOSITION OF THE PATIENT

After assessing the suicide risk the doctor has to decide if the patient is to be treated as an inpatient or outpatient. The decision will depend on the intensity of the suicidal intentions, the severity of associated psychiatric disorder and the availability of social support.

The following patients should be hospitalized:

1. Those with significant suicide risk.
2. Those who are psychotic or impulsive as they have little control over their suicidal urges.
3. Those who have little or no social support.

If after assessment the doctor is unsure of the disposition it is best to seek a psychiatric consultation.

CONCLUSION

Suicide is preventable. Being aware of vulnerable individuals or groups for suicide enables the doctor to focus attention on them for warning signs of impending suicide. The doctor can then institute treatment, provide support and alternative choices to such patients.

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