The role of family physicians in suicide prevention

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Summary

Suicide is a public health problem of varying scales in different countries and cities. Over the past few years, the suicide rate in Hong Kong has been steadily rising. This paper explores the unique strategic role of family physicians in suicide prevention, with special reference to the scenario in Hong Kong. Models of conceptualizing and assessing suicide risks were examined. Suggestions on how to actually conduct the assessment interview are presented for discussion.

摘要

不同國家和城市，自殺在不同程度上都是一個公眾健康的問題，香港過去幾年的自殺率也是逐步升高。本文就香港的情況，探討家庭醫生在防止自殺這個問題所扮演的獨特的策略性角色，檢視自殺風險評估的概念及模式，並就如何具體施行評估面談提出建議和討論。

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Introduction

To health care professionals, suicide is not just a philosophical or sensational topic for discussion around the dinner table, but a public health problem to combat. In Hong Kong, according to the Coroners Court statistics quoted by the Samaritan Befrienders, there were 1025 deaths by suicide in 2002, which amounted to 15 per 100,000 people in the local population.[1] Globally, the highest national suicide rates are found in some of the Eastern European countries and in some rural areas of Mainland China, which can be 3 to 5 times of those of developed countries. Lying somewhere in the middle, the suicide rate in Hong Kong is higher than those in the United States (11.5) and the United Kingdom. (7.6), while significantly lower than that in the Russian Federation (40.6). Around the Pacific region, the local suicide rate is higher than that in Australia (12.7) and Singapore (9.5), and lower than that in Japan (24.3).[2,3]

The local trend itself, however, has been on an alarming rise. In the 1990's, suicide rates in Hong Kong were around 10 to 13 per 100,000. More recently, the rates have risen to 13.5 in 2000, 14.7 in 2001, and 15 in 2002. Many people blame the rising suicide rates on the economic downturn, or the sensational reporting by the media. In actual fact, suicide is a multidimensional behaviour that results from a complex interaction of biological, psychological, sociological and environmental factors. Suicide prevention, therefore, can take on many different approaches and focuses.

The strategic position of family physicians

Studies by the World Health Organisation (WHO) showed that between 40% to 60% of people who committed suicide had seen a physician, usually a General Practitioner (GP), in the month prior to suicide.[4] Pearson found that more than 65% of the people who committed suicide in Hong Kong had consulted a doctor, most likely a GP, within 14 days of taking their own lives.[5] A recent study on elderly suicide in Hong Kong also found that 76.5% of the completers had consulted a doctor within 1 month before death.[6] However, instead of disclosing suicidal intent during a consultation, these patients would more often complain about stress-related physical ailments.[7] Since most individuals are ambivalent about dying till the very end,[4] family physicians are in a strategic position in suicide prevention. The challenge is to be able to assess suicide risks when suicidal intent is not explicitly expressed, and then provide the appropriate

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care (or referral) after detection. This paper aims to discuss concepts and methods that may be helpful for GPs in their work of suicide prevention.

Reasons for suicide

While a detailed examination of the intertwining causes of suicide is beyond the scope of this article, **Figure 1** shows a conceptual summary of the various reasons. Seeking death as a way out can be either a conscious decision with clear intent and thorough consideration, or an impulsive decision and act of the moment. More often than not, it takes a combination of both, but the degrees of conscious determination and impulsivity vary in different people and different points in time.

Many life stressors have been found to be correlated with suicidal intent. Mental illnesses, physical ill health in the elderly, unemployment in middle-aged males, and relationship problems in young people are among the most well-known correlates. However, the level of stress and distress are mediated by the subjective appraisal of the hopelessness of these situations.[8,9] Clinicians may have come across very resilient patients in their clinics who are fighting with debilitating physical illnesses, while on the same day read in the newspaper about an adolescent taking his or her own life after a relationship breakup. The scale of the problem one is facing and the possibility of resolving the problem are very subjective and appraisal is influenced by a multitude of factors, including previous experience and many psychological factors. Among them, hopelessness is found to be one of the most salient psychological predictors of suicide.[8,9] Death becomes a logical option when a person subjectively perceives that the physical or psychological pain is going to hopelessly continue in life.

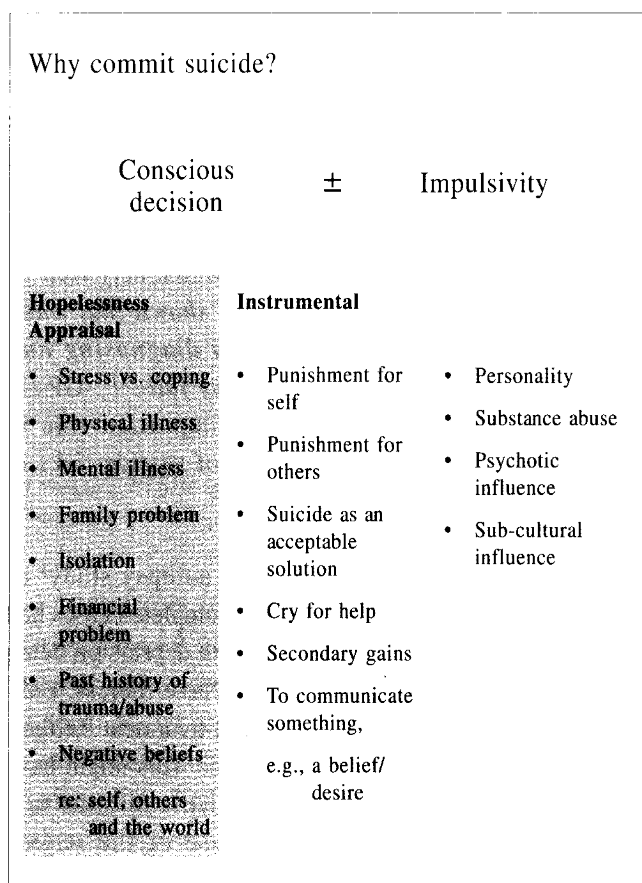
For people who do not feel particularly hopeless but still have made a conscious decision to commit suicide, they may have some instrumental reasons in mind, albeit to varying degree of their own awareness. For instance, one common reason found in adolescents or young adults is to profess their love to their partners through dying when other means of communication have failed. **Figure 1** shows some other common instrumental reasons. Hopelessness appraisal and instrumental reasons can of course co-exit. Suicide notes have revealed cases such as unemployed individuals taking their lives both out of hopelessness and also to accuse society or their former employers of unsupportive treatment.

There is also the element of impulsivity, which has been found to be increased in many suicide attempters suffering from depression, personality disorder, panic disorder and substance use disorders. Impulsivity seems to be linked to the serotonergic system. It has been proposed that impulsivity may be the underlying propensity lowering the threshold for acting on suicidal ideation.[10,11] Factors that increase impulsivity and reduce rational thinking (e.g., drug or alcohol abuse, mental illness, etc.) could potentially "tip the balance" in an otherwise still ambivalent individual.

Unique roles of family physicians in Hong Kong

Throughout the years, researchers have tried to identify factors that are related to or predictive of suicide. Mental illness is one of them. WHO statistics and other studies have consistently showed that mental disorders

Figure 1: A conceptual summary of the reasons why people commit suicide



exist in 80% – 100% of cases of completed suicide.[4,12,13] Many people who appeared to have become suicidal in reaction to some negative life events actually had some underlying mental problems.[14] It is estimated that the lifetime risk of suicide in people with mood disorders (mainly depression) is 6 – 15%; with alcoholism, 7 – 15%; and with schizophrenia, 4 – 10%.

The local picture, however, is quite different. In the year 2002, there were 283 completed suicides with official records of mental illnesses, which was only 28% of the total number of suicides in that year. Under-diagnosis could be one of the reasons why the rate was so much lower than those found by WHO. In fact, many individuals could have been in a state of hopeless depression before ending their lives. The other group, the impulsive ones, could possibly have had some long-standing personality problems. However, these individuals may not have gone to psychiatrists and received psychiatric diagnoses on record. In view of this phenomenon, clinicians locally cannot be complacent towards patients who do not have an existing psychiatric diagnosis during suicide risk assessment. On the contrary, GPs may need to be on the alert for symptoms of mental illness, and make differential psychiatric diagnoses if and when necessary. Among the top three mental disorders that are found to be highly related to suicide, depression can be most easily missed. People facing predicaments may think that it is normal or expectable to be upset, and do not think to consult a psychiatrist. While statistics show that they do see GPs, the depressive symptoms may not be picked up when the focus is on the physical complaints (which may well be stress-related). In fact, ***research has shown that when GPs are more alert and skillful in diagnosing and treating depression, suicide rates may fall.***[15,16] GPs in Hong Kong therefore play a very important role in bridging the gap of under-detection of suicide risks in relation to mental illness.

Recently, a local psychological autopsy study[6] of elderly suicide found that 86% of the completed cases had at least one current axis I diagnosis, with depression being the most common disorder (53%). Nevertheless, only 37% of the completed cases had sought treatment for their psychiatric problems before their death. This might have been due to a low awareness of psychiatric disorder or a reluctance to seek treatment because of the stigma attached to psychiatric illness. Seeing GPs, however, do not have such associated stigma, since the elderly will be consulting GPs frequently for their physical ailments anyway. To this end, GPs are again in a good position to bridge the gap of under-treatment and insufficient monitoring of this subgroup of high-risk individuals.

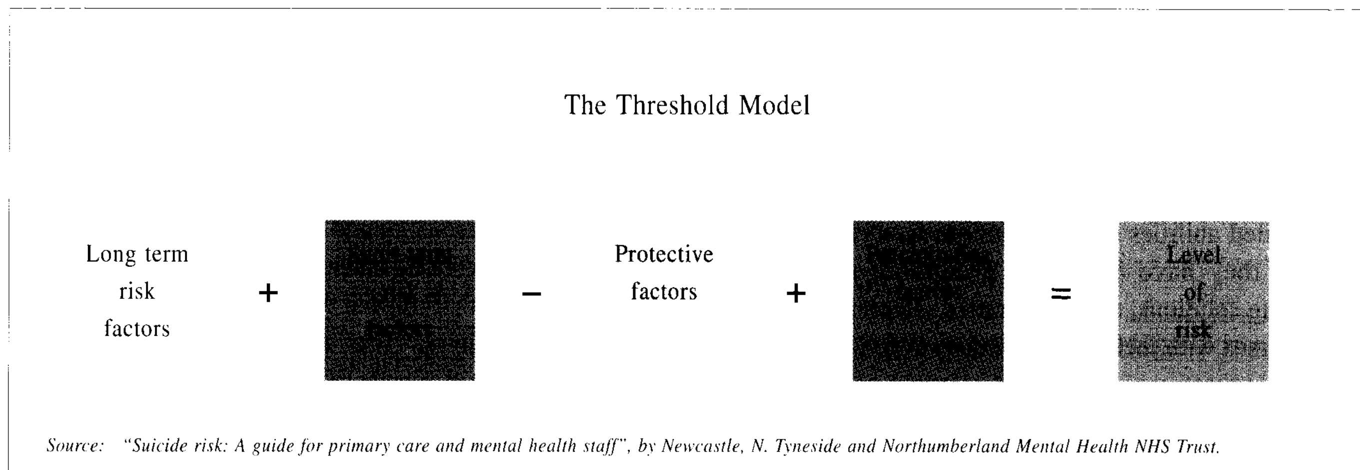
Another irreplaceable role of GPs in Hong Kong in carrying out suicide prevention lies in their accessibility to new immigrants from Mainland China who are likely to be facing many life stressors. Studies have found that the suicide rates in some areas of Mainland China are more than 30 per 100,000.[17] The reasons for such alarming rates are still largely unknown. If there were any socio-cultural factors behind the elevated suicide rates in China, the extra stress of coming to Hong Kong would probably exacerbate the impact of such factors even more. Since this group of new immigrants is even less likely to seek specialist help in case of psychological/psychiatric problems, family physicians may be their only professional lifeline.

Risks and protective factors

Any guidebook on suicide prevention will give a long list of demographic, biological, psychosocial and environmental risk factors found to be statistically related to suicide. Some of the psychosocial correlates of suicide include a history of delinquent or semi-delinquent behaviours in adolescents and young adults,[18] unemployment in adults,[19] and chronic illnesses in older adults.[20] These risk factors may be helpful for clinicians in detecting a high-risk subgroup among their patients. However, not every unemployed or chronically ill individual would become suicidal. A general list of risk factors is often not very helpful in determining the level of risk of a particular individual.

When it comes to individual assessment, the interaction of the patient's vulnerability, stress and coping is of crucial importance. **Figure 2** shows the Threshold Model of suicide risk. Similar to the vulnerability-stress-coping model, it emphasizes the interplay between many risk factors as listed in **Table 1**. The assumption behind is that different individuals may have very different thresholds of tolerating negative events in their lives, depending on the number and strength of the risk and protective factors. That is to say, one single negative event would not usually be enough to push an individual to the brink of suicide, unless he or she has

Figure 2: The threshold model of suicide risk



Source: "Suicide risk: A guide for primary care and mental health staff", by Newcastle, N. Tyneside and Northumberland Mental Health NHS Trust.

Table 1: Risk and protective factors in suicide risk assessment

Long-term risk factors

Genetic or biological influences

- Family history of depression
- Family history of alcohol or other substance misuse

Psychological characteristics

- Black-and-white, all-or- nothing, or rigid thinking
- Excessive perfectionism
- Hopelessness, with bleak and pessimistic views of the future
- Impulsivity, tending to do things on the spur of the moment
- Low self-esteem with feelings of worthlessness
- Poor problem solving skills, with difficulty in thinking of alternative solutions

Social influences

- Family history of suicide or attempted suicide

Short-term risk factors

Socio-environmental factors

- Divorced, separated or widowed
- Being older and/or retired
- Having little social support
- Being unemployed

Psychiatric diagnosis

- Depression
- Substance misuse (including alcohol)
- Schizophrenia (Also personality disorders, obsessive-compulsive disorder, panic attacks or panic disorder)

Protective factors

- The absence of risk factors
- Opposites of dysfunctional psychological characteristics

Additional protective factors

- Hopefulness
- Receiving mental health care
- Having responsibility for children
- Having strong social supports and feeling supported

Precipitating factors

- Recent loss or separation
- Imprisonment or threat of imprisonment
- Interpersonal problems, particularly humiliating social events
- Recent job loss
- Recent reminders of past deaths or other significant losses
- School or work problems
- Unwanted pregnancy
- Financial problems
- Health concerns

Source: Adapted from "Suicide risk: A guide for primary care and mental health staff", by Newcastle, N. Tyneside and Northumberland Mental Health NHS Trust.

some pre-existing mode of thinking which leads to very catastrophic or pessimistic interpretation of that event. On the other hand, the daunting quantity and severity of many negative events happening to one person may be enough to cause some individuals to want to "end it all", even if they are usually not too pessimistic. It would be like a tug of war between the various risk and protective factors specific to that particular individual.

Protective or moderating factors can be broadly divided into 2 groups: social factors, such as social support and responsibilities; and cognitive-psychological factors. Social support has consistently been found to be a very robust protective factor for many adversities.[21] The "pulling force" of social responsibilities, however, will be balanced against the "pushing force" of the other risk factors. This is evident by cases in which parents felt

extremely hopeless about the situation and took the lives of their children as well, hoping to "save" them from the perceived predicaments. This example highlighted the importance of cognitive factors in suicide decision making. Cognitive rigidity (e.g., dichotomous thinking) and problem solving deficits have been found to be characteristic of suicidal persons.[22,23] These individuals have limited abilities to find solutions to their problems because they have difficulty producing new ideas, identifying solutions, and deliberating alternatives. They would persist with ineffective solutions even when a more effective strategy was available.[24] Attributional style has also been found to be related to suicidal ideas. In their study,[25] Priester and Clum found that poor academic performance alone did not relate to suicidal ideation in a college sample. It was the interaction of poor results and the negative-stable attributional style (i.e., thinking that the cause of the negative event was internal and stable) that was related to suicidal ideation.

Assessing suicide risks in individual patients

Suicide risk is notoriously difficult to predict. Some checklists have been devised to calculate such risk, but they are less useful than a good clinical interview in identifying individuals who are at immediate risk of committing suicide.[4] The clinician has to inquire into various groups of factors as suggested by the Threshold Model. According to a guide for primary care professionals,[26] establishing rapport is the first step. The patients need to be able to trust the GP before they are likely to reveal how they truly feel. In addition, listening with empathy can reduce the patient's sense of despair. The second step is to ask about short-term risk factors such as mental and physical health. The clinician will try to establish the problem history and previous methods of coping. This will lead on to the assessment of long-term risks such as personality and thinking style. The GP then go on to seek information on support and other protective factors, followed by current circumstances and precipitating factors. After weighing the various factors, if a certain level of suicide risk is indicated, the GP should proceed to further assess actual suicidal intent, including any plans or recent attempts.

Some clinicians are a bit anxious when it comes to actually asking about suicidal ideations and plans, fearing that this will lead the patient on. There is actually no evidence that asking about suicidal ideation and intent in an understanding and supportive way would exacerbate the intent. On the contrary, some patients reported feeling relieved and understood after an empathetic discussion.[4,26]

Involving family physicians in suicide prevention has become a worldwide trend. Guidelines have been devised to give primary care professionals some ideas of what to ask and how to ask them.[14,26,27] **Table 2** lists some of the suggestions from WHO. Interested colleagues may like to read up on these guidelines or even seek further training in order to enhance their effectiveness in suicide prevention, risk assessment and follow-up counselling.

Table 2: WHO suggestions for GPs who need to assess patients' suicidal ideas

How do I begin to ask about suicide?

It is not easy to ask about suicide ideas; it is helpful to lead into the topic gradually with due attention to the patient, and using a counselling approach. For example:

1. Do you feel unhappy and hopeless?
2. Do you feel desperate?
3. Do you feel unable to face each day?
4. Do you feel life is a burden?
5. Do you feel life is not worth living?
6. Do you feel like committing suicide?

When to ask?

- After a strong rapport has been established.
- When the client feels comfortable about expressing their feelings.
- When the client is in the process of expressing negative feelings or thoughts.

Assessing suicidal ideas and intent

Assess the frequency and severity of the ideas and intent. Assess any actual plan or method.

- Have you made any plans for ending your life?
- How are you planning to do it?
- Do you have in your possession [pills/charcoal/other means]?
- Have you considered when to do it?

What next?

- Refer to specialist/hospitalise if necessary.
- Enlisting support of relatives or friend, or if suicidal risk is not high.
- Counselling plus appropriate medication.
- "No suicide" contract.
- Keep in contact with the patient.

Source: Extracted from "Preventing suicide: a resource for General Physicians". WHO.

Key messages

1. The local suicide rates have been on the rise.
2. WHO and local studies both found that many people had consulted GPs shortly before committing suicide. GPs are therefore in a strategic position to help prevent suicide.
3. Level of stress and distress are mediated by cognitive appraisal such as hopelessness. Hopelessness is found to be one of the most salient psychological predictors of suicide.
4. Research studies have shown that when GPs are more alert and skillful in diagnosing and treating depression, suicide rate may fall.
5. In the local context, GPs have irreplaceable roles in bridging the gaps of under-diagnosis of mental disorders, under-treatment and insufficient monitoring of high-risk groups, as well as accessing specific patient groups that may not seek specialist treatment readily.
6. A general list of risk factors is not very helpful for determining the level of risk of an individual. An individualized assessment based on the Threshold Model should be carried out.
7. Involving family physicians in suicide prevention has become a worldwide trend. Colleagues locally may like to look into training issues, and consider doing research on the role and effectiveness of GPs in suicide prevention in the local context.

Conclusion

In order to facilitate early detection of suicide intent, and to improve on the care after detection, it is important for family physicians to join forces with "specialists" such as psychiatrists or clinical psychologists in identifying, assessing and treating the high-risk individuals, especially given the scenario in Hong Kong when a large proportion of the suicide completers did not seem to have had formal contacts with the specialists. The preliminary findings that GP can indeed help reduce suicide rate after appropriate training[15,16] are encouraging. Colleagues may like to consider doing similar research studies on the role and effectiveness of GPs in suicide prevention in Hong Kong. ■

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