Assessment of Patients Who Attempt Suicide

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Suicidal behavior is influenced in varying degrees by biological, personal, and social factors. Identifying 4 common reasons for suicidal acts (psychosis, major depression, philosophical reasons, and poor impulse control) can be very helpful in evaluating suicidal patients quickly and making decisions about how patients should be treated. Educating the general public and primary care physicians about these reasons while addressing biological, personal, and social factors that contribute to them can improve understanding of suicidal behavior and patient involvement in and adherence to the treatment process.

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Suicide is the sixth leading cause of death in Japan. Since 1998, Japan has witnessed a steady, seemingly inexorable rise in the national suicide rate. The rate, which was constant at about 16 per 100,000 until 1997, precipitously rose to a record high of 26.0 per 100,000 in 1998.[1] During that year, 32,863 individuals (23,013 males and 9850 females) killed themselves, a 35% increase over the previous year and the highest rate since the government started tracking suicide in 1947. In 1999, the second consecutive year in which suicides were at a record high, 33,048 Japanese individuals (23,512 males and 9536 females; 26.1 per 100,000) committed suicide.[2] The number of suicides in Japan in 2000 fell 3.3% to 31,957 (25.2 per 100,000), but stayed above 30,000 for the third straight year.[3]

Japan's popular press suggests that the country's economic troubles play a major role in this increase, since Japan is in its deepest recession in 50 years. The National Police Agency (NPA) reports that, of all suicides in 1998, 6058 were committed clearly because of economic difficulties, an increase of 70.4% from 1997.[1] Motives for suicide were determined by suicide notes or, in cases where suicide notes were not left, by questioning the families. The report shows a 30% increase in suicides by the unemployed and a 45% increase in suicides by the self-employed and corporate managers, making clear a potential relationship between economic strife and completed suicide. The 1999 NPA report shows that 6758 people (20.4% of suicides) committed suicide due to economic difficulties caused by Japan's prolonged recession, up 11.6% from 1998.[2] The 2000 NPA report shows that concerns over economic difficulties accounted for 6838 suicides (21.4%).[3] The popular press has focused on this correlation between the current economic cycle in Japan and suicide rates based on these statistics.

Suicide is a tragic tradition in Japan, often resorted to as a means of escaping shame or of saving loved ones from embarrassment or financial loss. In Japan, suicide is considered justified and is even admired in these situations.[4]

SUICIDE ATTEMPTS RELATED TO ECONOMIC DIFFICULTIES

Case Report

The following case report describes a suicide attempt related to major depressive disorder and precipitated by economic hardship.

Mr. A was brought to the emergency room after being found unarousable in his bedroom by his wife. He had taken a full bottle of benzodiazepines, medications prescribed by his family physician. There was a suicide note, which said that he had no choice but to kill himself.

Mr. A, married for 30 years with 3 children, was a 50-year-old high-school graduate who had worked in several restaurants as a cook. At the age of 40, with the blessings of a supportive family, he financed his own restaurant by taking a second mortgage on his house with a loan company. For several years, his restaurant was very popular, crowded daily with a stable clientele.

Prior to Mr. A's admittance to the hospital for the suicide attempt, making money at his restaurant had become more difficult. The business had suffered financially during the recession. As the Japanese economy worsened, many people ate at home rather than going out to dinner. Most companies discouraged expensive business meals. It had become more difficult for Mr. A to pay the restaurant supplier, and he even occasionally got behind with payment of the employees' salaries. He found it difficult to sleep because he was thinking about his restaurant's

future. He could not see anything prosperous or bright about the future of his business. Hope was lost, and he decided to commit suicide. He thought that the life insurance refund issued after his death would resolve the restaurant's debt and cover his family's immediate needs.

Mr. A's psychiatric evaluation revealed that he suffered from major depressive disorder. For at least the last 2 months, he had experienced all 9 criteria for major depressive disorder outlined in DSM-IV. He had planned his suicide over the prior week and carried out his plan in private, thinking that no one would find him in time to save him. He did not believe that he was mentally ill, and thus did not seek professional help. His last visit to his family physician was for stomach pains a month previously. Although these symptoms were probably related to depression, Mr. A was given antacids. He did not mention his depressive symptoms to his physician.

Mr. A had an unremarkable birth, development, and childhood. Family history revealed that one maternal uncle had had a "nervous breakdown" and another had been treated for dementia and depression. The patient had no history of psychiatric or alcohol/substance use disorders. He used alcohol socially, and this suicide attempt was his first.

During hospitalization, he was started on medication. According to his wife, his restaurant was not in as much financial distress as he had indicated. She noted that they had reserve funds available for the restaurant's immediate needs and also that his employees and suppliers were very supportive in these times of need. The acute risk of suicide decreased within several days, and Mr. A was discharged home. He was followed up at the psychiatric outpatient clinic and fully recovered from depression in several months. He continues to operate his restaurant, recognizing, at least for the short term, that it will not be as prosperous as in the past.

Studies of the Relationship of Suicide to Economic Hardship

Depression should not be ignored or discounted just because it appears that the suicidal act is a "reaction" to unfortunate but commonplace life events. Although a precipitating factor, i.e., economic difficulties, might be significant in these cases, the patient described above also had major depressive disorder, which contributed to his decision to attempt suicide. His ability to deal with the difficult economic situation was affected by his depression. Had his emotional state not interfered with his judgment, he should have been able to manage the problem.

Just what is the relationship of suicide to economic difficulties and/or unemployment? A report by Lewis and Sloggett[5] suggests that social and economic policies that reduce unemployment will also reduce the rate of suicide. Using data from the Office for National Statistics longitudinal study in England and Wales, the authors show that the unemployed were overrepresented among suicides between 1983 and 1992. Several studies, however, indicate that there is only a loose association between unemployment and suicide. Makinen[6] reported that changes in the Swedish unemployment rate correlated with the suicide rate among males between 1920 and 1941. As unemployment dramatically reemerged in Sweden in the 1990s, rising suicide rates were expected, but did not occur. Instead, as unemployment rates in Sweden increased 5-fold from 1990 to 1994, suicide rates fell 14%.[7]

In a study of the relationship between suicide and the economic cycle in Finland from 1985 to 1995, Hintikka et al.[8] found that unemployment and the divorce rate did not consistently correlate with suicide mortality. Beautrais et al.[9] in New Zealand also studied the association between unemployment and serious suicide attempts in 302 patients. When psychiatric morbidity and antecedent family and childhood factors were taken into account, unemployment was not significantly related to risk of serious suicide attempt. Further, La Harpe and Dozio[10] reported a decrease of the suicide rate between 1991 and 1995 in Switzerland despite high unemployment, a concomitant of economic stagnation. Finally, Ostamo and Lonnqvist[11] studied rates of attempted suicide during the major social and economic changes caused by a sudden economic recession in Helsinki from 1990 to 1998. They reported that, despite a deep economic recession with rapidly rising unemployment, suicide attempt rates remained stable. Furthermore, completed suicide in Helsinki decreased by 21%.

On the basis of these studies, the relationship between unemployment/economic strife and suicide is, at most, loose and perhaps even nonexistent. Despite this, the mass media continue to report a relationship between the national economic situation and suicide. We do not know why the Japanese suicide rate has risen. It does not appear that the relationship between the suicide rate and the economic downturn is the whole answer. In this article, we suggest a need to focus on other credible reasons for suicide attempts[12,13] and aim to improve the ability of primary care and mental health professionals to identify and treat those at risk as well as educate the public.

BIOLOGICAL, SOCIAL, AND PERSONAL FACTORS ASSOCIATED WITH SUICIDE

Suicidal acts are most likely the result of an interaction of biological, social, and personal factors. Biological factors manifest themselves in the form of a predisposition to psychiatric disorders or physical illness that has a high incidence of comorbid psychiatric illness. Social/environmental factors, such as economic hardship, interact with biological factors to bring out psychiatric symptoms in vulnerable individuals. Personal factors, which include personality traits, approaches to problem resolution, and self-image, determine the degree to which social

factors influence a patient's biological vulnerability and lead to the development of symptoms. Although the combination of these 3 factors can lead to suicide acts, many people have a tendency to emphasize social factors to the exclusion of contributions by the others.

In fact, biological vulnerability to depression probably plays the greatest role in suicide attempts related to stressful situations such as the one described in the case report above. Several investigations have found a correlation between the onset of an episode of major depression and exposure to stressful life events.[14–18] The reports by Kendler et al.[17,18] go a step further when they suggest that genetically influenced traits predispose not only to episodes of major depression but also to exposure to stressful events that precipitate them. It is, therefore, important to avoid the trap laid by the mass media that points to commonplace stressful life events rather than depression as the etiology of suicide attempts.

Systematic community studies of suicide further support this contention. Fewer than 5% of suicides have been reported in the absence of psychiatric symptoms.[19–22] In Japan, although there has not yet been a complete psychological autopsy study, other studies of suicide attempters reveal that the majority of suicide victims had mental disorders.[23,24]

EMERGENCY EVALUATION OF SUICIDE ATTEMPTERS

Recognizing that biological, social, and personal factors interact as a person decides to harm himself or herself is the first important step in the evaluation of a patient who has attempted suicide. The clinician should be aware that all 3 areas will have to be addressed as the patient is examined and intervention is initiated. The second step is understanding the risk factors associated with completed suicide (e.g., past suicidality, alcohol and drugs, family history of suicide, and so on)[25–30] so that longitudinal treatment and follow-up can be implemented, which makes a subsequent attempt less likely. The third pressing component of the evaluation is to uncover which one of 4 pragmatic reasons the patient had for the attempt, because this reason will drive decisions regarding treatment.

Regardless of the degree to which biological, psychological, or social factors are involved and the number of risk factors the patient has, decisions about how the patient will be assisted largely rest on the reason for the attempt. For instance, if the patient is psychotic and has attempted suicide in response to command hallucinations or discomfort with his or her psychotic symptoms, treatment usually requires admission to the hospital and treatment of the psychosis. Depression may or may not be present, but the psychosis needs to be addressed. Except in unusual circumstances, outpatient intervention would not be a consideration.

Thoughts of death and self-harm are a hallmark of major depression, and suicide attempts are common. The patient described above would fall into this category. Most psychiatrists and other clinicians are aware that depression is a frequent and replicable risk factor for suicide.[31–33] Importantly, suicide attempts and completed suicides typically occur when the patient is depressed. Rarely do they occur between depressive episodes. If patients demonstrate major depressive disorder, even after serious life stress or crisis, treatment of depression should always be among the treatments provided. In most patients, this treatment would include antidepressant medication and/or electroconvulsive therapy.[34] Hospitalization of these patients is the rule rather than the exception, since the risk of suicide subsides only when depression improves.

Perhaps the most common reason for suicide attempts is that the patient loses control of his or her emotions during a fit of anger, disappointment, frustration, or the like. The patient acts impulsively to get back at someone, to prove his or her point, or just to end it. An adolescent who impulsively takes a large amount of acetaminophen after a quarrel with family or friends would be a typical example. Many such suicidal acts occur in association with alcohol or drug ingestion, since both impair judgment and foster impulsivity.[35] In fact, it has been reported that nearly 20% of people who commit suicide are legally intoxicated at the time of their death.[25]

Impulsive suicide attempts are also seen more frequently in patients with personality disorders, especially borderline and antisocial personality disorders. Patients who attempt suicide impulsively are usually responding to acute personal upheaval. While questions about depression and psychosis should always be asked, in most patients, criteria for major depressive disorder and psychosis are not met if the patient is interviewed once he or she is less intoxicated. It may be useful to assess the degree of substance use if the patient is suicidal while drinking and then not suicidal when sober.

The therapeutic approach to patients who attempt suicide impulsively is much different than those previously mentioned. Since the attempt was precipitated by an acute crisis, the precipitating event tends to resolve quickly. Many patients with impulsive attempts are embarrassed that they did such a "stupid" thing and voice no intention of repeating. This is particularly true after patients have had an opportunity to become sober or for a drug to wash out of their system. In the absence of depression or psychosis, psychotropic medications are unnecessary. Supportive psychotherapy and crisis intervention with follow-up in the outpatient setting are usually sufficient to get the patient through the episode. It is usually a good idea to observe the patient for several hours or even up to a day if it is apparent that the patient will return to a source of continuous conflict. Hospitalization is rarely necessary.

Just because impulsive attempts often occur under the influence of alcohol does not mean that depression cannot also be present. This is particularly true in patients with alcohol dependence. The relationship between alcohol dependence and completed suicide has been noted in numerous studies.[19,26,36–42] Of 24 studies reviewed by Petty[43] and the Agency for Health Care Policy and Research Depression Guideline Panel,[34] most found that between 10% and 30% of patients with alcoholism also suffered from depression during acute evaluation. These findings mandate that patients entering the emergency treatment center, even those under the influence of alcohol or drugs, be questioned about depression. If depression persists after sobriety has been established, treatment of depression should be considered. Such treatment usually starts with an alcohol rehabilitation program.

Philosophical reasons for attempting suicide, i.e., those related to life circumstances such as untreatable, debilitating cancer, constitute an increasing minority of suicidal acts. Most studies suggest that this group accounts for fewer than 5% of suicide victims.[19–22] They are, however, a group with needs to address not commonly thought of outside of ethical circles. Most frequently seen in the medical setting, these patients talk about or attempt suicide because they do not want to suffer from chronic pain, do not want to be a financial or social burden on their relatives, or are just dissatisfied with their living situation. It is these patients, for example, who initiate arguments for euthanasia or physician-assisted suicide. The controversy surrounding euthanasia and physician-assisted suicide has long existed.[44]

Since this is an uncommon presentation for suicidal behavior, it is prudent to completely exclude other potential reasons. Most suicidal patients, even when medically ill, will be found to have depressive and/or alcohol-related disorders if a proper psychiatric examination is conducted.[31–33,45–48] Even in terminally ill patients, the vast majority of patients with suicidal thoughts or suicidal attempts have been found in prior studies to have depressive disorders,[49,50] as was the case in the patient described above.

The key point in patients with philosophical suicidal ideation/attempts is that they have decision-making capacity and no demonstrable psychiatric illness, yet wish to kill themselves. If, after several days of constant observation, which is usually possible only in the hospital, patients are found to have no depression, psychosis, alcohol dependence, or other, less common psychiatric illness that could impair judgment, they cannot be kept against their will. If they wish, they can return home and kill themselves.

Experience in working with these patients, however, has proved that most do not end up killing themselves. As the evaluation proceeds and the physical needs of the patients are addressed, including pain control; maximizing clinical, social, and financial support; and discussing the impact of the patient's decision to take his or her own life on relatives and friends, most choose not to proceed with their plans to kill themselves. Most merely need reinforcement that they are valued and that the medical system, with the input of relatives and friends, will help them as their condition progresses. In fact, we reported that "rational" suicidal plans were transient and often ameliorated over time.[48] Furthermore, studies of dying patients show that most patients' desires for physician-assisted suicide diminish as their underlying concerns are identified and addressed directly.[51]

CONCLUSION

In summary, suicidal behavior is influenced by biological, personal, and social factors. The importance of these in each individual is related to the reason that the patient has for considering or attempting suicide. For instance, regardless of personal or social concerns, patients with a personal or family history of depression, psychosis, and/or alcohol dependence have a biological vulnerability for these illnesses with increased suicide risk. While personal and social factors should be attended to during the therapeutic process, these patients always require treatment of their underlying illnesses, usually with medication or other somatic therapies. Physicians should never be content that they have adequately treated a patient if they only adjust the patient's social situation or attend to the patient's personal concerns, as is often suggested by lay accounts in the news media. A more fundamental reason for suicidality may be missed.

On the other hand, in patients with impulsive or philosophical ideation or attempts, psychiatric illness is not the issue. These patients require assistance with finding effective ways to deal with crises or using long-term coping strategies. Even in these patients, while personal and social factors take on greater importance in addressing the patients' aberrant behavior, biological factors cannot be ignored. Patients with philosophical reasons for attempting suicide will only change their life plan if they see that physical infirmities, such as pain, will be better handled. Patients with impulsive attempts require repair of the damage done from their suicide attempt.

Educating the general public and primary care physicians regarding the factors that lead to suicide attempts is an important contribution to suicide prevention. In fact, Rutz et al.[52] reported that such an educational program for general practitioners on an island off the coast of Sweden led to a drop in the suicide rate. They concluded that primary treatment of patients by physicians who better understood factors involved in suicidal acts may have reduced the suicide rate in that area. Furthermore, educating the public may also improve the participation of patients in the treatment process.

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