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Depression and Suicidal Behavior in the Elderly: A Literature Review

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Depression and suicide are significant health problems in the United States and Japan, and suicide is still considered primarily a phenomenon of adolescence to middle age. However, it is also a significant problem in the elderly (65 years old and above). The purpose of this report was to review the literature relative to the depression and suicide in the elderly in the United States and Japan. Several important factors involved with elderly suicide were different between the 2 countries. While Americans suffer from psychological problems, Japanese more likely suffer from physiological problems. Cultural and religious backgrounds play an important role in the decision to commit suicide.

Key words: cultural differences; depression; elderly; suicide

Depression and suicide are significant health problems in the United States and Japan. There are more than 30,000 suicides a year in the United States – the 8th leading cause of death in 1998 (Mann et al., 1999). In Japan, there were 31,413 suicides in 1999. This was the 6th leading cause of death (Health and Welfare Statistics Association, 2001). Nevertheless, suicide is still considered primarily a phenomenon of adolescence to middle age, and most research has focused on this age group. The reality is that suicide is also just as a significant problem in later life (Osgood, 1992; Takahashi, 1995; Stack, 1996).

Takahashi (1997a, 1997b) compared and contrasted attitudes toward suicide between Japanese and Americans, suggesting that most Japanese think that suicide is not always an abnormal behavior. In contrast, Americans are more likely to think that suicide usually results from psychiatric problems that can be prevented.

The reasons why suicide is a significant problem in the elderly rather than in other age groups are as follows:

i) The elderly have the highest successful suicide rate;

ii) There is a high correlation between suicide behavior and depression (Nordstrom et al., 1995; Fawcett et al., 1990; Malone et al., 1995; Isometsa et al., 1994; Pokorny, 1993; Roy, 1999);

iii) Despite a high prevalence among the elderly, depression is rarely recognized or treated properly in this group. This suggests that the elderly group has a high risk in this aspect more than any other age groups.

The purpose of this report was to review the literature relative to depression and suicide in the elderly in Japan and the United States, focusing on the cultural differences between the Japanese and Americans.

Depression and the elderly

Depression, one type of mental disorder, is a significant risk factor of suicide (Nordstrom et al., 1995; Fawcett et al., 1990; Malone et al., 1995; Isometsa et al., 1994; Pokorny, 1993; Roy, 1999).

Although depression is considered a major factor for suicide in the elderly, there is a lack of reliable data because of difficulty in diagnosis.

Blazer (1989) reported that diagnosed cases of major depression were not differentiated from cognitive impairment, anxiety and disruptions. The most frequently used approach in epidemiological studies was not based on confirmed diagnoses but symptoms. Several researchers shared the concern that diagnoses were difficult to confirm, especially in a certain population or community. The term "depression" in the following research was not well defined compared to the current concept. However, the results of the research are worthwhile mentioning. Blazer and Williams (1980) surveyed 997 people with symptoms of depression who were over the age of 65 in a community in North Carolina and found 14.7% had significant dysphoric symptoms. Murrell and his coworkers (Murrell et al., 1983; Murrell and Noris, 1984) interviewed 2,517 people (over 55 years old) with depressive symptoms (diagnosed based on these symptoms) and found that 16% had significant depressive symptoms, especially in the oldest age group (75 years and above) and in females. Berkman et al. (1986) surveyed 2,806 people (age and sex, not determined) in New Haven and found 16% with significant depressive symptoms in females and older people. Kennedy et al. (1989) investigated 2,137 people (age and sex, not determined) in the Bronx in New York and found 16.9% with significant depressive symptoms in females and the oldest. Most researchers used the Center for Epidemiologic Studies Depression Scale for screening, while Blazer and Williams (1980) used the Older American Resources and Services Depression Scale. The results of these reports were similar in prevalence (approximately 15%) and demographic trends (more in females and the most elderly).

As seen in the community population, studies on an inpatient population had similar results. Rifai et al. (1994) studied the symptom of hopelessness in 63 depressed patients with an average age of 67.2 years and found that patients with high hopelessness scores had a history of suicidal attempts and were also more likely to drop out of treatment. Shah et al. (1997) screened for depression among acutely ill geriatric patients in a hospital with a short geriatric depression scale. Depression was common among those geriatric inpatients.

There are few diagnosis-based epidemiological studies on relationships between the elderly and depression in the United States. In Japan, there was a close relationship between the elderly and depression (Koizumi et al., 1990; Takahashi, 1992, 1993; Chow, 1996; Takahashi, 1998). In the Japanese elderly, one of the characteristics of depression was a denial of being depressed. Their depressive symptoms manifested as somatic or hypochondriac complaints that their family members often ignored and were unable to be accurately diagnosed by their primary physicians (Takahashi, 1995). Interestingly, in other countries, for example in England, the opposed was found. Dewey et al. (1993) surveyed the 3-year mortality of 1,063 people who were 65 years old or above in a community in Liverpool and found that effects of depressive symptoms were not confirmed as a strong factor for mortality.

Suicide and the elderly

Although the suicide rate has increased most dramatically among the young during the past 20 years, the elderly white male remained having the highest suicide rate in the United States (Devons, 1996). There are 2 high-risk groups: the young and the elderly. This phenomenon is also seen in Japan. Depression was suspected to be a major factor in suicide of the elderly. However, there is a lack of reliable data, because it is difficult to identify specific cases. Several researchers (Jobes et al., 1987; Hlady and Middaugh, 1988; McIntosh, 1989; Fischer et al., 1993; Phillips and Ruth, 1993) stated that suicide was underreported due to a reluctance to certify the death as suicide, the non-uniformity of certification procedures, and the variability in the background and training of those responsible for certifying the cause of death. In terms of accuracy, the thoroughness of a postmortem examination could reveal the cause of death. However, autopsies were performed on about 50% of suicide cases and accidental deaths. In suicide, the 10 most common causes of death were firearms, hanging, tranquilizers, barbitu-

rates, car exhaust, other sources of carbon monoxide, jumping from man-made structures, drowning and cutting-piercing instrument. If all deaths due to these causes (excluding drowning) were considered suicides, the number of suicide cases would exceed about 50% among all deaths. In some metropolitan areas, a high rate of suicide may reflect a high rate of autopsy examinations performed. McIntosh (1992) predicted that in the future, the elderly suicide rate will be extremely high based on the large "baby boomer" population.

Why do the elderly commit suicide? Jorm et al. (1995) studied factors associated with attempted suicides in the elderly and suggested several factors in addition to depression: a status of being unmarried, poor health (self rated), disability, pain, hearing impairment, visual impairment, and living in a nursing home or a hotel. Johnston and Walker (1996) stressed the importance of assessing the elderly with atypical symptoms of depression who might not express their distress and stated that 3 factors must be considered in assessing suicidal tendencies in the elderly: i) impaired ability to communicate, ii) intractable tinnitus and iii) a feeling of helplessness.

Even in contemporary Japanese society, there are a strong stigma against suicide as a mental disorder and an intense prejudice toward related mental disorders. Because of this, Japanese individuals were reluctant to seek help from mental health professionals and feared that they might be ostracized if they were diagnosed as a psychiatric illness (Takahashi, 1997a, 1997b).

Lester and Yang (1992) studied the correlation among the suicide rate, the divorce rate, the impact of the gross national product per capita, the unemployment rate and the percentage of the population that was Roman Catholic. Economic prosperity had a beneficial impact on the elderly. The unemployment rate had an impact on only those aged 54 years or younger. When Roman Catholic membership increased, the suicide rate in the elderly population lowered. The suicide rate was high, when the divorce rate was high. In contrast in Japan, the divorce rate was comparably low. However, the suicide rate increased in the elderly. The divorce rate after retirement age has increased, since some wives demanded divorce after long years of tolerating unacceptable conditions. As a result, male suicide attempts increased (Takahashi, 1997a, 1997b).

In North America, Canetto (1992) studied gender and suicide in the elderly and found that the older women were less likely to attempt suicide than older men. Several other researchers reported a similar result (Osgood, 1985; McIntosh, 1992; Conwell and Brent, 1995). In Japan, the number of male suicides was statistically greater than those of females (Health and Welfare Statistic Association, 2001).

Schnid et al. (1994) pointed out a difference in risk factors between ideation and attempts, and the significant predictors included religion, examination of mental status, living arrangements and medication history. The established risk factors did not appear significant in the distinction of ideation from attempters.

The Japanese elderly were mostly Buddhists, and religious doctrine includes developing the ability to accept death with complete equanimity. Death is one of the choices to escape from anguish and suffering, characteristic features of human existence. It is considered purification in Buddhism. Japanese society also accepts the act of suicide as a form of artistry. In contrast, in countries with a high number of Christians including the United States, the act of suicide is severely condemned. Society also condemns the act. In the United States, the causes of suicide include biological problems such as diseases, psychological problems including death of a spouse or friend, an unforeseen future after retirement, economical problems, a reduced role in society, and sociocultural problems. In contrast, in Japan, difficulties due to physical handicap, disease, senility and physical inferiority, together with psychological and biological factors are the causes of suicide. Furthermore, the Japanese elderly may hide any psychological problems, since having such problems might be seen as weakness that the elderly do not accept. Thus, early

diagnosis opportunities are lost. As a health care provider, consideration of psychological problems must be impeccable, even though physical conditions seem normal.

Conclusion

In the 21st century, the United States and Japan are both facing aging society. Although depression is a significant predictor of suicide in the elderly, increasing numbers and rates of suicide have not been focused on as major health problems. More than half of elderly people did not know much about depression as being a health problem, and they believed that it was normal. In Japan, the number of suicides significantly lowered after suicide prevention was implemented in remote areas where suicide rates had been high. Thus, it is important to educate and encourage not only the elderly and their families but also primary health professions to implement prevention strategies.

Several important findings concerned with elderly suicides include:

i) "The elderly" is a high-risk group;
ii) Depression seems to be a major cause of suicide;
iii) Causes of depression are different between the United States and Japan – Japanese are more likely to suffer from physiological problems, while Americans suffer from psychological problems;
iv) Cultural and religious backgrounds play an important role in the decision to commit suicide.

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