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Suicide deaths in Japan
Analyses of suicide methods

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Abstract **The increasing number of suicide deaths is one of the most serious social problems in Japan. Analyses of suicide methods by ICD-10 code show that X70 (hanging) was highest among X60−X84. It is important to provide basic and analytic data in making effective health policies.**

Introduction

Recently, the number of suicide deaths is more than 30 thousand annually, and suicide is the 6th leading cause of death in Japan.

The number of suicide deaths has increased with repeated ups and downs (Figure 1), and age-adjusted suicide death rates show that rates in 2003 and 1950 are almost the same for males, while the former is one-half of the latter for females, and the gender difference has gradually increased (Table 1).

The suicide death rates by sex and age groups show that a major peak for males in their fifties was observed in 2003, and both sexes in their seventies and older have shown a downward trend (Figure 2).

We need analytic data to cope with the situation and to prevent suicide effectively. Our analyses included all aspects of suicide deaths, but at this time, our report covers analyses of suicide methods by ICD-10 code ,X60−X84 only.

Figure 1 Trend in numbers of suicide deaths

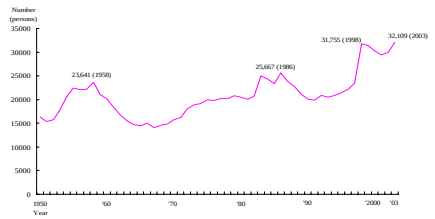
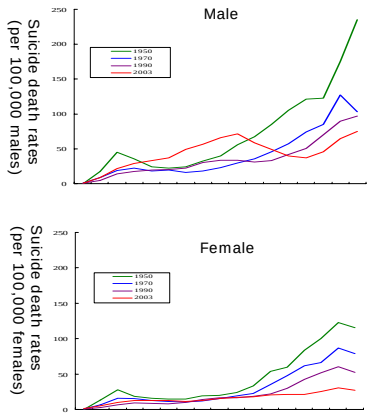


Table 1 Trends of age-adjusted suicide deaths rates (per 100,000 population)

	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000	2003
Male	35.1	38.5	30.0	21.8	20.6	24.1	24.3	26.9	20.0	21.3	30.7	33.2
Female	20.7	22.4	20.6	14.4	14.7	15.6	13.4	12.5	10.8	9.3	10.7	10.9

Note: The age-adjusted death rates are calculated by using standard population in 1985.

Figure 2 Trends of rates (per 100,000 population) of suicide death by sex and age group



Methods & Materials

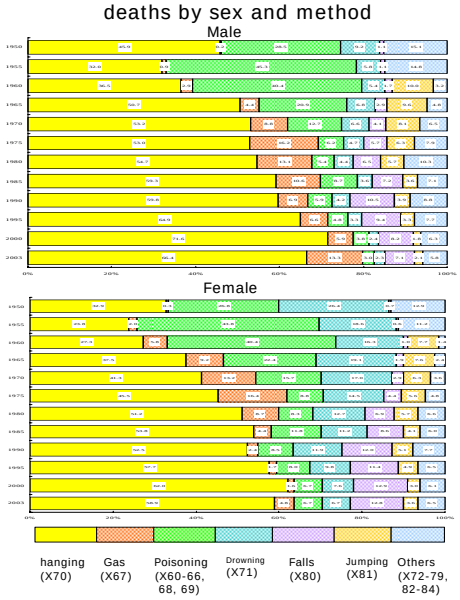
We analyzed suicide deaths from 1950 to 2003 based on the data of Vital Statistics of Japan. Using the ICD-10 , as for codes of X60−X84, we arranged X60−X66, X68 and X69 to poisoning, and X72−X79 and X82−X84 to others. We adjusted contents of ICD-10 with ICD-6 (1950−1957), ICD-7 (1958−1967), ICD-8 (1968−1978) and ICD-9 (1979−1994).

We calculated and observed the following two aspects of suicide methods.

1)Annual comparisons of percentage distribution of suicide deaths by sex and method

2) Percentage distribution of suicide deaths by sex, age group (10 year of age) and method, 2003

Figure 3 Annual comparisons of percentage distribution of suicide deaths by sex and method



Notes:1) 'Frequent acts of self harm and sequelae' are excluded from total numbers in 1950, 1955,1995, 2000and 2003.
2) There was no classification for 'Jumping', which was included in 'Other' in 1950 and 1955.

Results

1)Annual comparisons

For number of suicide deaths by method, poisoning showed the highest between 1953 and 1960 for males, and between 1952 and 1962 for females, but then fell off rapidly. Nearly at the end of this period, the regulations on drugs were strengthened based on the result of Vital Statistics and it is said that the policy caused the rapid fall of poisoning.

In other years, hanging has been the most common, and shows an upward trend both for males and females (Figure 3).

2) Suicide by age group

For percentage distribution of suicide deaths by sex and age group (10 year of age) in 2003, hanging was the highest for all age groups of both sexes. Especially for males 60 years and older and females 70 years and older, the percentage surpass 70%.

For the second most frequent method for males, gas, was around 20% especially for those in their thirties and forties. The second most frequent method for females, falls, were around 25% for teens, twenties, and thirties (Figure 4).

Conclusions

Generally, suicide deaths are affected by complicated factors, for example, socioeconomic or individual factors. At this time, we analyzed suicide methods, we found methodological differences due to periods or age groups.

In Japan, we have a history of good systems recording statistics of deaths and applying ICD which provides analyses such as the foregoing. Our close communication with other policy making departments enables us to provide useful data.

Figure 4 Percentage distribution of suicide deaths by sex, age group (10 year of age) and method,2003

