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Short report

The present state of suicide and the presentation community intervention trials in Japan

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Abstract

Suicide is now a major public health issue in all countries. The number of suicides in Japan has remained around 25 per 100,000 since 1998. This was the highest rate recorded since the Ministry began tracking mortality statistics.
The strategic research program for suicide prevention was begun in 2005 by The Ministry of Health, Labor and Welfare. The program's components of intervention were social support, primary prevention and secondary prevention.

Key words: suicide, prevention

Suicide is a serious public health problem and a significant public health issue in all countries.

Suicide is a complex phenomenon, and it is difficult to explain why some people decide to commit suicide, though, in general, it is surely motivated by a complex interaction of psychological, social, financial and environmental factors. Its prevention and control, therefore, are not an easy task. Still, most suicides can be prevented.

The World Health Organization (WHO) reported that the rate of suicide in Japan was the higher than in any other nation. The highest annual rates of suicide reported by 10 nations of Eastern Europe were more than 27 per 100.000. The suicide rate of Japan has remained around 25 since 1998. Latin America and Muslim countries report the lowest rates at fewer than 5.0 (Fig. 1).

In 1997 the number of suicides in Japan was 23,494 with the number rising to 31.755 in 1998—a 35% increase and the greatest increase recorded since the Ministry began tracking mortality statistics. (Fig. 2) Among the young generation aged 15-35 years, suicide is among the top three causes of death in Japan.

The suicide rate has traditionally been high in the three prefectures of the northern Tohoku area (Aomori, Akita and Iwate), in Niigata and Shimane and in the Kyushu prefectures of Miyazaki and Kagoshima. (Fig. 3)

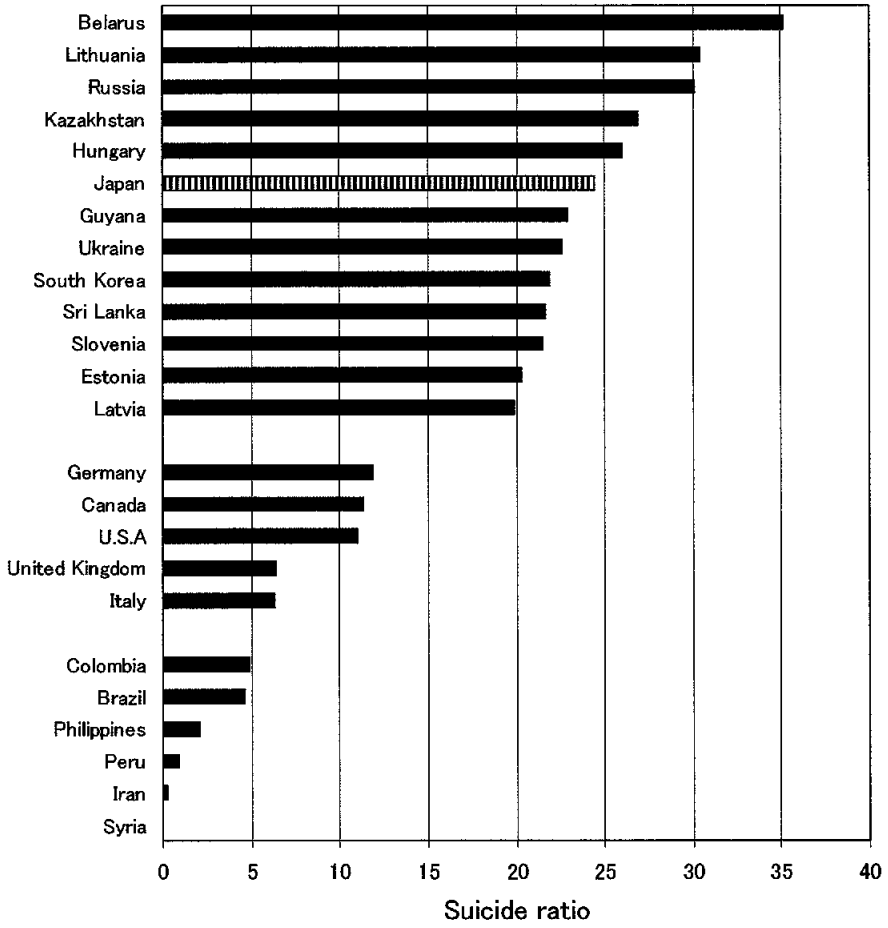
The increase in the number of suicides that began in 1998, however, is not necessarily attributable to suicides in those rural areas.

The recent increase has been significantly more prominent in urban areas such as Tokyo, Osaka and their surrounding areas.

With regard to the recent trends in suicide rates by age, the middle-aged population was found to have a higher suicide rate. About 40% were 45 to 64 years of age, the rate generally increasing with age (Fig. 4).

Suicidal behavior has multiple causes. It has been showed that psychiatric disorders such major depression and alcoholism are major contributing factors. According to some reports, more than 90% of suicides involve some psychiatric illness.

According to statistics of the National Police Agency, health and financial problems were the top two reasons for suicide. Since 1998, the number of suicides due to financial or lifestyle problems increased more rapidly than those arising from health problems. In 2004, the number of suicides due to financial or lifestyle problems



(for comparison: Italy: 6.3, United Kingdom: 6.9, U. S. A: 11.0, Canada: 11.3, Germany: 11.9)

Fig. 1 A comparison of suicide rates in various countries. The suicide rate in Japan was the higher than in any other developed nation

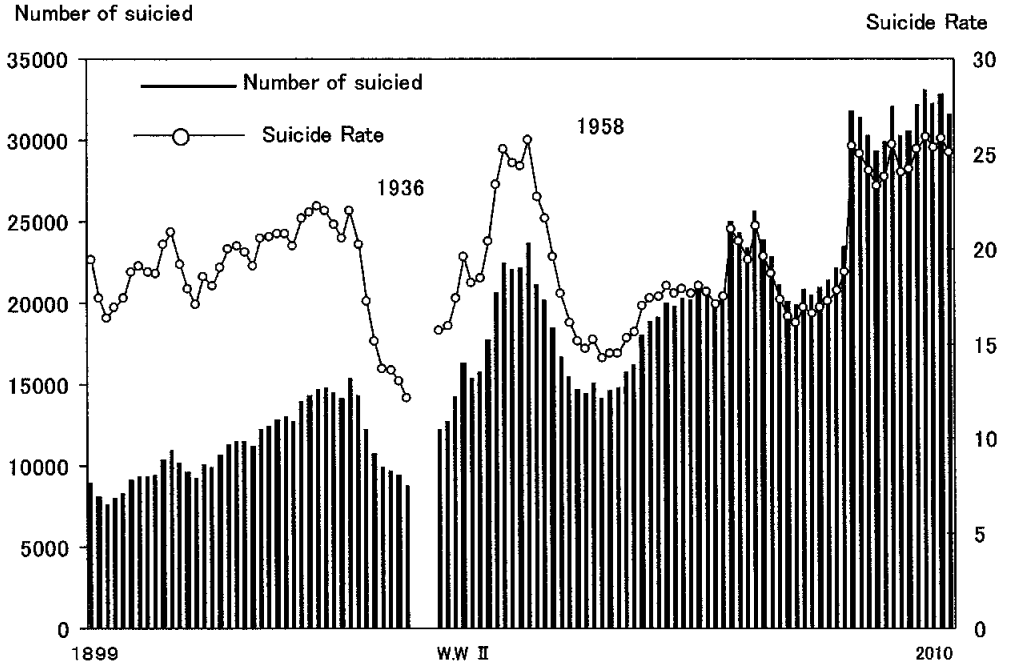


Fig. 2 Change in numbers of suicides and suicide rates in Japan from 1899 to 2010. From 1998 the number of suicides has remained more than 30.000

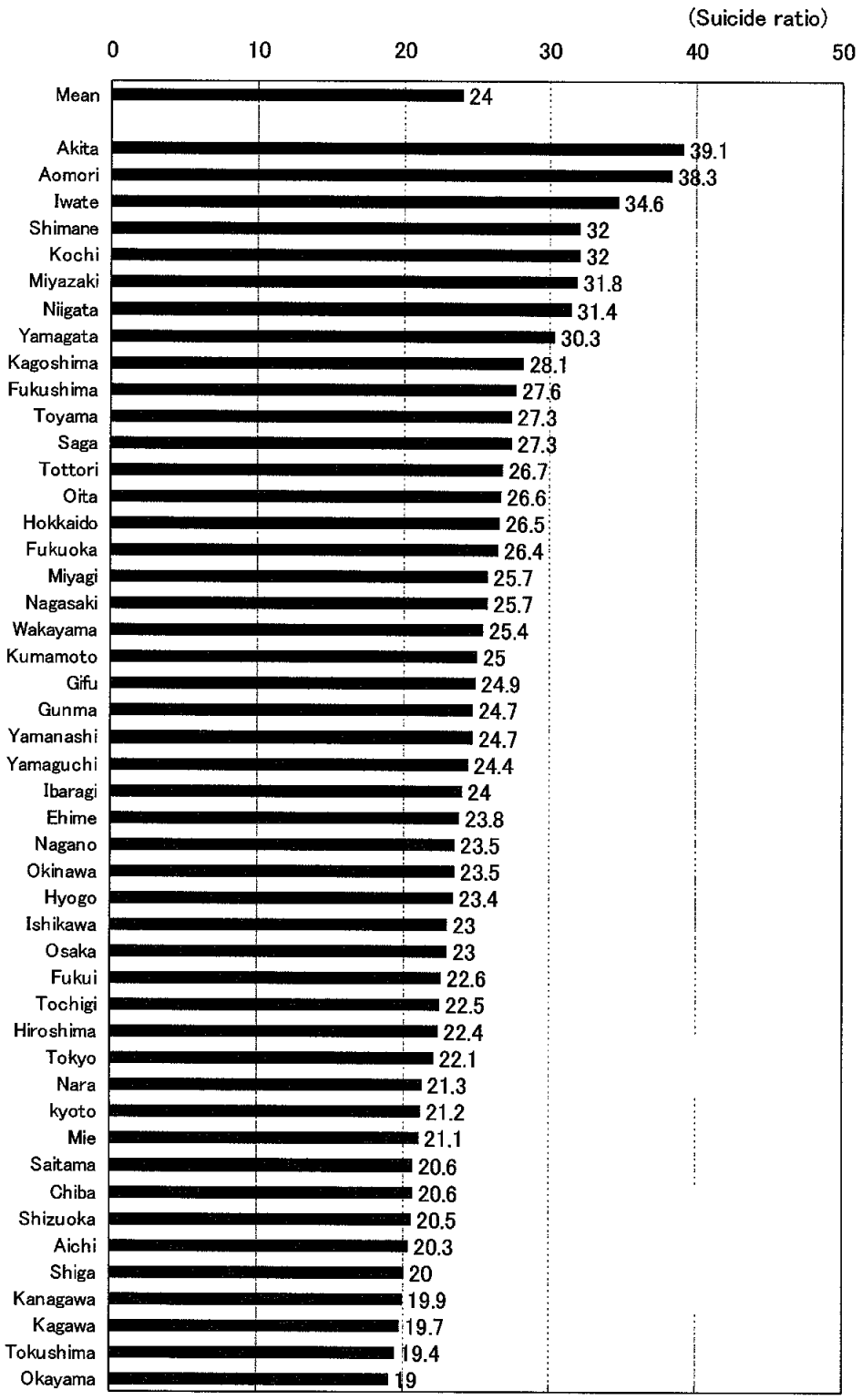


Fig. 3 Suicide rates of all prefectures in Japan The northern Tohoku area suicide ratio is traditionally high.

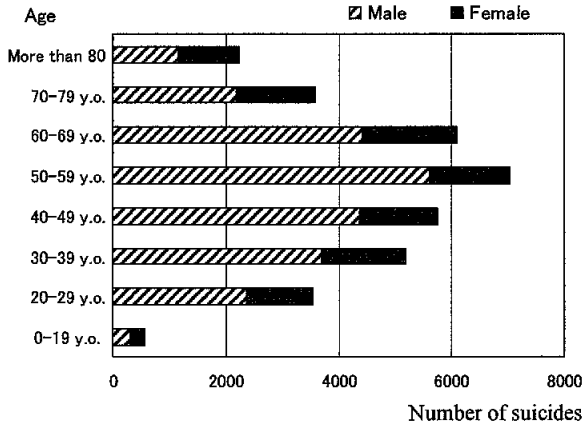


Fig. 4 The number of suicides for each 10-year group and for each sex in 2005

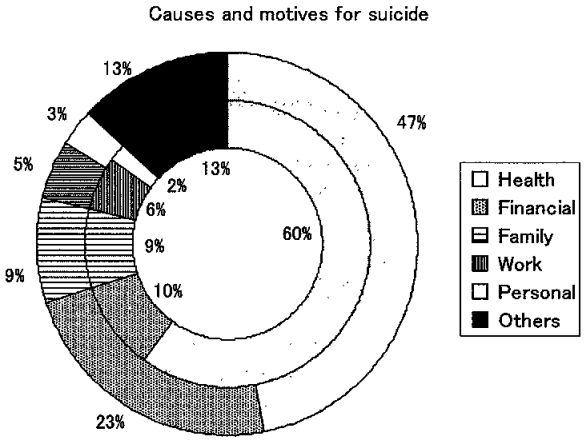


Fig. 5 Comparison of causes and motives for suicide 1989-1996 (inner circle) and 1998-2006 (outer circle)

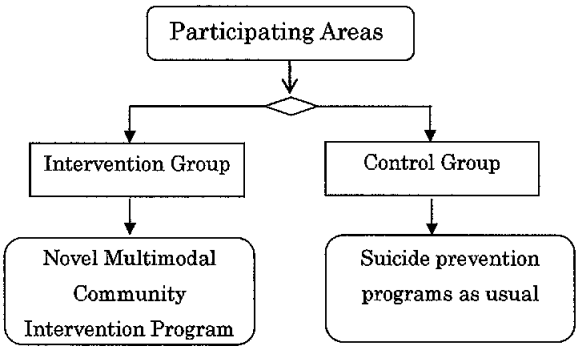


Fig. 6 Flow diagram of the study

increased 24.6% compared to the previous year. (Fig. 5)

Appropriate dissemination of information and awareness-raising are essential elements for success in prevention programs.

From 1985 to 2005, some community-based programs for suicide prevention trials were implemented in Japan. These trials used a quasi-experimental design and included suicide rate as the primary outcome. The programs included the development of social support networks in the community. These intervention programs were administered by local governments and targeted people over 65.

Recently, multimodal large scale intervention trials targeting all ages were conducted in four municipalities of Akita. The result of these trials was that the suicide rate of 68 per 100,000 for all residents was reduced by 27%. These trials suggest that community-based intervention would be effective for preventing suicides. The trials also suggested that the increase of suicide in Japan may be related to social isolation and the absence of a personal psycho-social relationship compared with financial success in old age.

However, sample sizes in these trials were relatively small and the monitoring of the implementation process was insufficient.

Large community-based programs for suicide prevention trials should be conducted to develop effective, evidence-based suicide prevention programs.

The strategic research program for suicide prevention in Japan was started in 2005 by the Ministry of Health, Labor and Welfare. (Fig. 6)

The goal of this research was to examine the effectiveness of community-based intervention programs for suicide prevention and to compare the suicide rates of relatively highly intervened regions with control regions.

Interventions in the control regions include the usual suicide prevention programs, such as lectures and workshops for suicide prevention and training programs for mental health.

Interventions in the study group ere more active. The programs focused on building social support networks in the public health system for suicide prevention and mental health promotion.

The program components for intervention in the study group were the following:

1) Social support
   Application of social resources
   Networking in public health promotion
   Reinforcing human relationships in the community
2) Primary prevention
   An awareness campaign for mental health
   Psycho-education for depression
3) Secondary prevention

Screening for high-risk individuals (i. e., those with Major Depression)
Counseling and outreach services

The study group includes regions in Aomori, Akita, Iwate, and the Minami-kyushu area, with a total population of 670,000 individuals. The control group includes regions in Sendai, Chiba, and the Kitakyushu area, with a total population of 1,450,000 individuals.

The baseline information showed the number of suicides in the study regions in the 3 years prior to the study (2003–2005) recorded indicating sex and 5-year age groups.

Information from the suicide prevention program in the two groups was collected every 6 months.

The following data were also collected: the proportion of unmarried people, widows, divorcees, unemployed people and those in retirement.

The data collected was handled exclusively by the data management center.

The number of suicides was calculated in order to compare the study group and the control group. In addition to the analysis, an evaluation was done on whether the number of suicides was reduced significantly more in the study group than in the control group.

The purpose of this strategic research program for suicide prevention was to reduce the number of suicides in the study group and to evaluate the effectiveness of a community based suicide prevention program.

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