

# The Present State of Suicide and Suicide Countermeasures

Yutaka Motohashi and Yoshihiro Kaneko

Japan Support Center for Suicide Countermeasures

## 1. The Present State of Suicide in Japan and the Role of the Japan Support Center for Suicide Countermeasures

Based on vital statistics compiled by the Ministry of Health, Labour and Welfare, the number of people who committed suicide in Japan in 2015 was 24,417 (16,875 men and 7,542 women), a decrease of 7,692 (24 percent) from the 32,109 suicides in 2003, which was the highest number since the suicide rate spiked in 1998.<sup>1</sup> In 1998, there was a notable increase in the number of suicides among middle-aged men, but since 2003 suicides among men aged 45–54 have decreased greatly, and since 2009 a similar decline has been seen among men aged 55–64. It is clear that the decline in suicides among middle-aged men has contributed significantly to the reduction in the number of suicides in Japan as a whole.

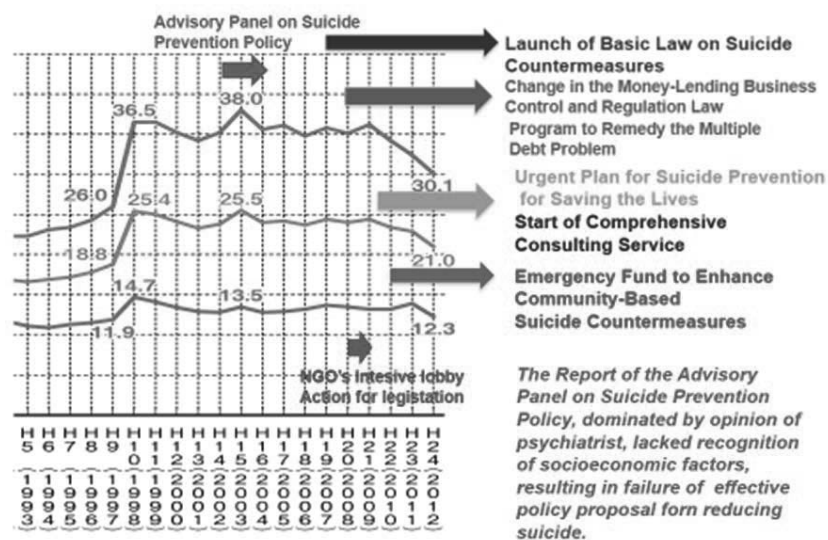


Figure 1. Time series trends in the Japanese suicide rate (1993–2015). Implementation times of various comprehensive suicide countermeasures and changes in the suicide rate.

Figure 1 shows chronological changes in the suicide rate between 1993 and 2015. It indicates the times at which major comprehensive suicide countermeasures were implemented. A reduction in the suicide rate can be seen since 2010 after the Lehman shock.

The implementation of the Basic Law on Suicide Countermeasures in 2006, the drawing up of the General Principles of Suicide Prevention Policy in 2007, revisions to the Money-Lending Business Control and Regulation Law, the launching of the Program to Remedy the Multiple Debt Problem, the setting up of one-stop counseling services based on the Emergency Plan to Prevent Suicide and Protect Life, and other comprehensive suicide countermeasures that have been rolled out in rapid succession are thought to have interacted with each other and had the effect of helping to alleviate economic problems primarily among middle-aged men.

The impact on the suicide rate of the Lehman shock, a global financial crisis, was not felt in Japan. An example of a country where the suicide rate went up as a result of the austere budgetary and fiscal policies imposed in the wake of the Lehman shock is Greece. When a strict austerity policy went into effect in 2010 so that Greece could receive financial relief measures, the suicide rate in 2011–2012 rose by 35 percent over the period 2003–2010. Budget tightening led to unemployment in the public sector, and the suicide rate is thought to have risen as a result of the increased economic instability.<sup>2</sup>

In April 2016, as the Basic Law on Suicide Countermeasures enacted in 2006 headed into its tenth year, the revised Basic Law took effect. The fact that the newly revised law clearly sets forth the basic principles of suicide countermeasures is extremely important. Paragraph 1 in Article 2 stipulates:

With the aim of ensuring that all people are valued as human beings and are able to live meaningful lives with hope for the future based upon their zest for living, suicide countermeasures must be implemented as comprehensive support for people's lives in a way that contributes to overcoming various factors that may interfere with the accomplishment of this aim and widely and appropriately establishing and enhancing the environment to assist and facilitate such support.

And the fifth paragraph states that “Suicide countermeasures must be implemented on a comprehensive basis through the organic coordination of measures and policies related to health, medicine, welfare, education, labor and other relevant issues”; the specific reference to the areas of “education” and “labor” is expected to significantly strengthen the promotion of suicide countermeasures in the workplace as well as those aimed at children and students.

After the Basic Law was enacted in 2006, suicide countermeasures underwent an expansion at the prefectural and municipal levels. The creation in 2009 of the Fund for the Urgent Improvement of Local Suicide Prevention Measures in particular is believed to have been effective in raising the standard of such measures at the community level. Nevertheless, suicide countermeasures at the municipal level have trouble maintaining constant revenue sources and human resources, nor can it necessarily be said that such measures have been promulgated equally by all local governments. In order to eliminate this sort of disparity in suicide prevention measures at the prefectural and municipal level, the present Basic Law on Suicide Countermeasures stipulates that the prefectures and municipalities are obliged to make the effort to draw up such plans (Article 6). Developing a system to eliminate disparities in community suicide countermeasures will be a major task for the foreseeable future. The mission of the Japan Support Center for Suicide Countermeasures (JSSC), newly established in April 2016, is to help promote such measures, and it will devote itself to developing and offering specific assistance plans.

## **2. Disparities in the Prefectural Suicide Rates: Why Is It Necessary to Draw up Community Suicide Countermeasure Plans?**

It is well known that there are regional differences in the suicide rate. The existence of these disparities becomes clear when one attempts to chart the published suicide rates by prefecture. In this paper, we will reaffirm that regional differences in the prefectural suicide rates do exist but that they are not fixed, rather they fluctuate with the times as a result of changes in socio-economic factors.

Figure 2 shows the prefectural suicide rates for the years 1955 and 2015. A glance at the distribution by prefectures of the suicide rate in 2015 shows that the rate is higher in the northern Tohoku area than in other regions. There is a recognizable trend

toward high suicide rates in underpopulated rural areas. When we look at the prefectural distribution of the suicide rate in 1955, on the other hand, we see that the places with high rates of suicide were urban areas and that the suicide rate in underpopulated areas such as the northern Tohoku was by no means high.

Some people are inclined to make the groundless claim that “the suicide rate is high among the people of the northern Tohoku region because of the particular characteristics of those who live there,” but it is obvious from Figure 2 that such an argument is wrong. In the 1950s and 1960s, the suicide rate in the rural prefectures of the northern Tohoku, which contained many depopulated areas, was not high; it was the high rate of suicides in the major cities that was the problem.<sup>3</sup> In this period, the problem was suicides among urban youth. Subsequently, as the Japanese economy grew rich during the period of high economic growth, the suicide rate in rural areas went up, and so did the rate in the northern Tohoku. The shift in the suicide problem from the big cities to the rural prefectures is assumed to be related to socio-economic factors such as structural changes in Japanese society during the transition to the period of high economic growth, in particular the steady depopulation of the rural prefectures, changes in local communities and in family relations, etc.

A further look at the suicide rate by prefecture for 2015 in Figure 2 shows that the prefectures with high suicide rates are, in descending order, Akita (26.3), Shimane (24.8), and Niigata (24.6); conversely, those with the lowest rates are, in ascending order, Osaka (14.6), Kanagawa (15.2), and Fukui (15.2).<sup>4</sup> The determinants for these fluctuations in the suicide rate are complex but are thought to be related to various factors such as population density, skewed demographic composition, the degree to which depopulation has advanced, income levels, etc.



Figure 2. Suicide rates by prefecture (1955 and 2015). Suicide rates in 1955 were highest in Tokyo, the Kansai area, the Chubu region, etc.; in 2015, rates were highest in the Tohoku region and other areas where the population is declining.

Since the Basic Law on Suicide Countermeasures went into effect in 2006, such measures have made headway throughout the entire country of Japan; the allotment of a budget for them to the municipalities after the creation in 2009 of the Fund for the Urgent Improvement of Local Suicide Prevention Measures has accelerated the nationwide diffusion of these measures. When the relation between the total amount that was spent on the fund's programs in the prefectures (dispositioned amount for 2009–2014) and changes in the suicide mortality rate (the difference in the rates for 2008 and 2014) is plotted on a scatter graph, the correlation is recognizable. It is clear that the higher the total amount spent per capita was, the further the suicide mortality rate declined between 2008 and 2014.<sup>1</sup> This can be said to suggest that the efforts of the Fund for the Urgent Improvement of Local Suicide Prevention Measures have contributed to a lowering of the suicide rate.

From the above, the strong suggestion can be inferred that, in order to eliminate regional disparities in prefectural suicide rates, in addition to allocating an appropriate budget to suicide countermeasures, it is effective for each prefecture to promote them vigorously and comprehensively.<sup>5</sup> It is important to understand that this sort of

scientific evidence lies behind the requirement to formulate a community suicide prevention measure plan in the Basic Law on Suicide Countermeasures as revised in 2016.

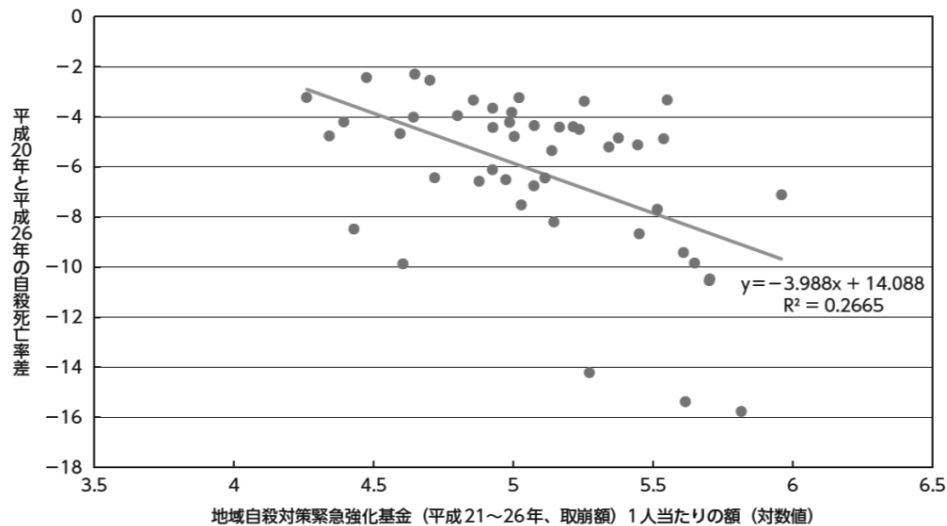


Figure 3. The relation between the total amount spent on programs under the Fund for the Urgent Improvement of Local Suicide Prevention Measures and changes in the suicide mortality rate (*Suicide Countermeasures White Paper* [in Japanese], 2016 edition, p. 73).

### 3. Policy Assistance for Understanding Actual Local Suicide Conditions and Formulating a Community Suicide Countermeasure Plan

In order to promote community suicide countermeasures at the municipal level, once the officials in charge of such measures and other interested parties know the actual state of suicide in their area, they will need to accelerate their efforts to formulate an appropriate suicide prevention plan for their community. Eliminating regional disparities in suicide countermeasures, especially those at the municipal level, will require tools that can convey to administrative officers at the city, town, and village level, in a readily understandable manner, the actual state of suicide in their municipalities. At the JSSC, the Office for Suicide Data Analysis has taken the lead in developing “a suicide data profile” as a tool that can show at a glance a community’s

actual suicide conditions.<sup>6</sup> Figure 4 shows an example of a “suicide data profile.” In drawing up such a profile, use was made of existing official statistics. Based on the national census, vital statistics surveys, business and economic statistics, statistics related to living conditions and lifestyles (Comprehensive Survey of Living Conditions, Survey on Time Use and Leisure Activities, etc.), the Office uses pie charts, bar charts, etc., to display in an easy to understandable way the number of suicide victims for each municipality, its suicide rate, and related local features, and compiles a simplified report, similar to a health screening report, on the measures a community can take to prevent suicides. Figure 4 presents data on the suicide rate by sex, age, and occupation, but it is also possible to display assessments and trends of the means of suicide, comparisons of causes and motives, estimates of mental health states, the implementation status of suicide countermeasures, current conditions at nongovernment organizations, etc. An analysis of these suicide data will become the grounds for drafting measures that are tailored to actual suicide conditions in a community.

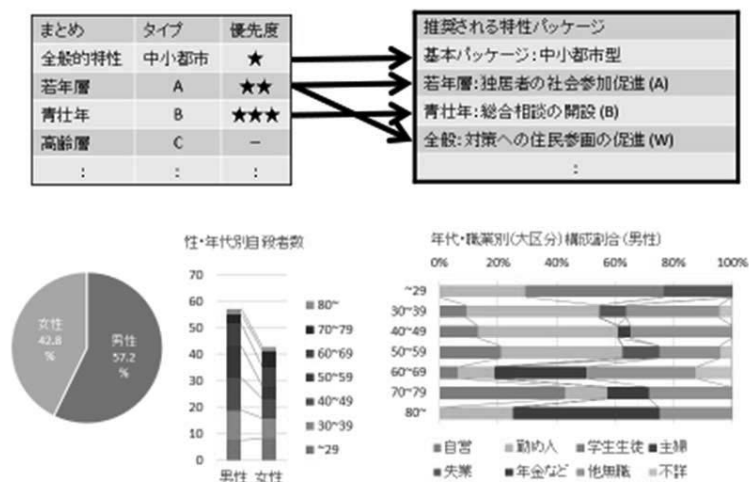


Figure 4. Example of a suicide data profile. A summary of the analytical results and recommended countermeasures (regional specific package) are given in the upper half; the local suicide data that form the background for them are shown

in the lower half. The profile gathers together and summarizes the grounds for considering measures that are tailored to actual local conditions.

On the basis of the data in its suicide data profile, a municipality will formulate a community suicide countermeasures promotion plan. Normally, it will independently draw from among a number of suicide prevention policies to work out a plan tailored to local conditions and decide on its own policy. On the other hand, as a specific support policy for municipalities, the JSSC is thinking of offering a package of policy measures that correspond to local conditions based on the local suicide data profile in the hopes that the municipal officials in charge will find it useful when drawing up their own community suicide countermeasures promotion plan. In future, the Center plans to present every city, town and village with its own suicide data profile and concurrently provide policy packages and examples of groups of policies for suicide countermeasures that are applicable to each municipality. Figure 5 is an example of a community suicide countermeasures policy package. It consists of two levels, a basic package and a regionally specific package.

The basic package is a group of essential suicide countermeasure policies that are regarded as necessary for any community. Among the policies given in the General Principles of Suicide Prevention Policy is a group of basic policies that are unlikely to be affected by local characteristics: specifically, raising awareness and providing information, building community networks, implementing interdisciplinary coordination, establishing counseling services, developing and training human resources, supporting nongovernment agencies, improving the system of care for suicide survivors and the families of suicide victims, etc. The basic policy package is divided into three types depending on population size. In short, there is a basic package for large urban areas, one for small- and medium-sized cities, and one for mountainous areas. The reason for dividing the package into three groups based on population size is that the results of previous studies provide clear scientific evidence that the intervention of comprehensive community suicide countermeasures in rural (mountainous) areas has the effect of lowering the suicide rate whereas it is known to be difficult to verify the benefits of these measures in metropolitan areas. Unlike mountainous areas, large urban areas are thought to require detailed measures which take demographic factors into consideration.



A regionally specific package, as the term implies, considers a group of policies to be implemented that are tailored to the characteristics of the actual suicide conditions in the municipality they are intended for. For example, in large urban areas, in situations where the lack of social participation among young people who live alone is thought to be an important suicide factor, the strengthening of policies to encourage them to become socially involved would be desirable. Likewise, an area with a notorious suicide spot requires a specialized group of policies to counteract the high risk of suicide there. The JSSC is planning to provide a results table in its community suicide data profile that will show the analytical results of the actual state of local suicides along with a special package recommended for that community. As shown in Figure 5, for the basic recommended package of small- and medium-sized urban areas, specific packages are designated to encourage social participation for members of the younger generation who live alone, to establish one-stop counseling services for young and middle-aged adults, and to promote public involvement in suicide prevention policies as a whole; based on this, the municipal officials in charge can take into consideration the group of policies that should be incorporated in their community's suicide countermeasure plan.

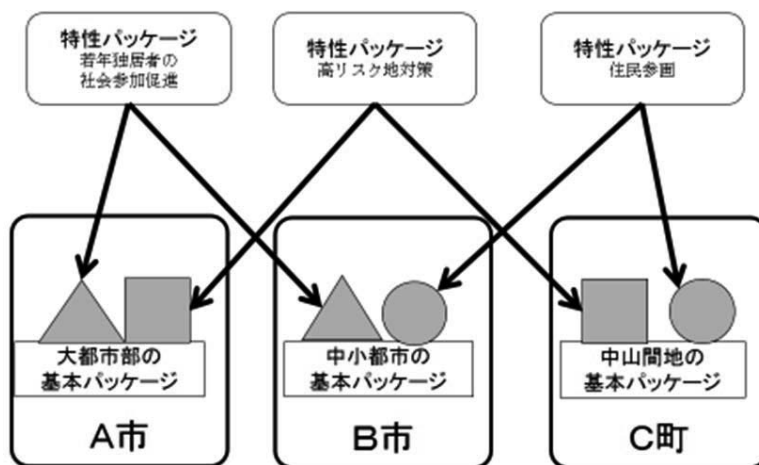


Figure 5. Example combining a basic policy package and a regionally specific package for a municipality. The basic package or regionally specific package

is recommended and chosen based on the results of an analysis of each municipality's suicide data profile and other factors.

#### **4. The PDCA Cycle for Suicide Countermeasures**

Under the revised Basic Law on Suicide Countermeasures, a system has been developed to promote such measures at the community level. Since the law makes each municipality responsible for formulating its own plan, the importance of the PDCA cycle in suicide countermeasures has attracted attention. Formulating a plan means a municipality must lay out a vision for the future, have a clear work schedule for implementing specific policies, check on their state of progress, and make improvements. In future, municipal policy initiatives are likely to be assessed in conjunction with evaluations based on the PDCA cycle.

Although it is desirable that evaluations of the effectiveness of suicide countermeasure policies be carried out on the basis of thorough scientific assessments, at present, scientific verification of the effectiveness of these policy interventions cannot necessarily be said to be adequate. As regards evaluating the effectiveness of policy intervention in community suicide countermeasures in Japan, a certain level of scientific evidence has been gathered from national strategic studies and from community intervention studies in the Tohoku region. In rural areas (mountainous regions), the introduction of comprehensive suicide prevention measures has been shown to be associated with a rapid reduction in the local suicide rate. Unfortunately, in metropolitan areas, however, clear scientific evidence is lacking that local intervention leads to a reduction in the suicide rate.

Based on the circumstances just cited, in promoting future suicide countermeasures, the steady implementation of the PDCA cycle for community suicide prevention measures must go hand in hand with scientific support if the PDC cycle is to operate effectively. In the case of studies on national suicide countermeasures to be conducted primarily by the JSSC, we plan to carry out the research needed to provide the scientific evidence for turning the PDCA cycle. Figure 6 shows the relationship between policy studies of national suicide prevention measures that operate in conjunction with the PDCA cycle. Policy studies that keep in mind working in

conjunction with the PDCA cycle are becoming important and are necessary to make the PDCA cycle for suicide countermeasures effective.<sup>5,7</sup>



Figure 6. The PDCA cycle for suicide countermeasures

## References

- <sup>1</sup> Ministry of Health, Labour and Welfare, *Heisei 28nenban jisatsu taisaku hakusho* (Suicide white paper, 2016 edition), Tokyo: Ministry of Health, Labour and Welfare, 2016.
- <sup>2</sup> G. Rachiotis, D. Stuckler, M. McKee, and C. Hadjichristodoulou, “What has happened to suicides during the Greek economic crisis? Findings from an ecological study of suicides and their determinants (2003–2012),” *BMJ Open* 2015 Mar 25;5(3):e007295 doi: 10.1136/bmjopen-2014-007295.
- <sup>3</sup> Yutaka Motohashi, *Jisatsu ga hetta machi: Akitaken no chōsen* (The town where suicides went down: Akita Prefecture’s challenge), Tokyo: Iwanami Shoten, 2006.
- <sup>4</sup> Statistics and Information Department, Minister’s Secretariat, Ministry of Health, Labour and Welfare, “Heisei 27nen jinkō dōtai tōkei geppō nenkei (gaisū) no gaikyō” (Summary of the annual total [in round numbers] of the monthly report on vital statistics for the year 2015), 2016.
- <sup>5</sup> Yutaka Motohashi, “Chihō jichitai no jisatsu taisaku no kōka no hyōka to kongo no tenbō” (Evaluation of the effects of local municipal suicide countermeasures and future prospects), *Kōshū eisei (Public health)*178.4 (2014): 236–240.
- <sup>6</sup> Ministry of Health, Labour and Welfare, “Heisei 28nendo daiikkai zenkoku jisatsu taisaku shukan kachō kaigi haifu shiryō” (Materials handed out at the first national conference of supervisors in charge of suicide countermeasures, 2016) (Yutaka Motohashi, person in charge), Tokyo, June 8, 2016.
- <sup>7</sup> Kazuhisa Najima, “Chiiki de sasaeru ‘inochi’: chiiki jisatsu taisaku kinkyū kyōka kikin of hyōka” (Community-supported life: evaluation of the Fund for the Urgent Reinforcement of Community Suicide Countermeasures), in Yutaka Motohashi, ed., *Yoku wakaru jisatsu taisaku: tabun’ya renkei to genbaryoku de “inochi” o mamoru*

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(Protecting lives through on-site action and multidisciplinary cooperation), Tokyo: Gyōsei, 2015.

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