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## Special Feature Article

### Cooperating Psychiatric Hospitals/Clinics and Administrative Organs for Suicide Attempters

Tetsushi TSUJIMOTO<sup>1,2</sup>, Morikazu SHIBAZAKI<sup>2</sup>, Kazushi DAIMON<sup>2</sup>, Toshifumi NOGUCHI<sup>2</sup>, Satoru SENGAN<sup>2</sup>, Hiroshi HAMAKAWA<sup>2</sup>, Naoki MATSUMURA<sup>2</sup>, Tomohiko ASADA<sup>2</sup>, Ken OI<sup>2</sup>

1 Shiga Mental Health and Welfare Center

2 Shiga Mental Health Medical Center

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#### Abstract

The prevention of suicide reattempts is a pillar of suicide countermeasures. Since 2011, Shiga Prefecture has been taking measures to prevent suicide reattempts in many areas and cities. In 2017, we provided support for more than 130 suicides attempters. The prefecture held a review meeting for the Shiga Prefecture suicide attempters support system; each prefecture has developed an enterprise that reflects the characteristics of the region. By implementing a suicide attempter support project in all prefectures, suicide countermeasures can be developed in a common direction. Psychiatric care plays a major role in the underlying community support network.

**Keywords**: suicide attempter, emergency notification hospital, administrative organ, consultation support

## Introduction

The "Basic Law on Suicide Countermeasures", which was revised in 2016, states that "Suicide prevention measures shall be implemented in a comprehensive manner in organic coordination with health, medical care, welfare, education, labor, and other related measures", and recommends the promotion of a social model while including a medical model. The Comprehensive Measures to Prevent Suicide" identifies "prevention of repeated suicide attempts by persons who have attempted suicide" as one of the priority measures for the time being. [Figure 1](#) shows the changes in the number of suicides nationwide by history of suicide attempts [3\)](#). Although the number of suicides has decreased overall, the number of suicides with a history of attempts has not decreased as much as that of those without a history of attempts, indicating the difficulty in providing support for those who have attempted suicide. As the World Health Organization reports that suicide attempts are the greatest risk factor for suicide [8\)](#), prevention of reattempts by persons who have attempted suicide is important for suicide prevention measures. A "fee for continuous psychiatric support for emergency patients" has been established as a reimbursement system for psychiatrists' involvement in complex

case management [2\)](#) to prevent recurrent suicide attempts in patients who have attempted suicide and are transported to an emergency room. However, there are only a few facilities that are able to calculate the "emergency patient psychiatric continuity support fee" as part of regular community psychiatric care. In Shiga Prefecture, a system for the prevention of re-proposal of suicide attempts has been established through complex case management by collaboration among community psychiatric institutions, emergency hospitals, and administrative agencies (public health centers, mental health welfare centers, cities, and towns). In this report, we describe the practice of psychiatric suicide prevention in Shiga Prefecture, focusing on the collaboration between psychiatric treatment and community health and welfare for suicide attempters. The study of suicide attempters was approved by the Ethics Committee of the Shiga Prefectural Psychiatric Center.

## I. Mental Health and Medical Welfare, Number of Suicides, and Other Situations in Shiga Prefecture

The population of Shiga Prefecture was 1,412,881 as of October 1, 2018, with 697,791 males and 715,090 females. Shiga Prefecture has 7 secondary medical care areas. There are

13 psychiatric hospitals with inpatient wards (about 2,400 psychiatric beds), 5 general hospitals with only outpatient psychiatric care, and 24 psychiatric and psychosomatic medicine clinics. The number of designated mental health physicians is about 7 per 100,000 people, the fourth lowest in Japan. As for physical emergencies, there are 31 designated emergency hospitals and 4 emergency centers.

The number of suicides in Shiga Prefecture in 2018 was 227, 167 males and 60 females (recorded in the place where the suicide occurred), with a suicide mortality rate of 16.1% [4\)](#). [Tsujiimoto et al. 6\)](#) conducted a survey of suicide attempters and found that during a 4-week period from January 18 to February 14, 2010, public rescue agencies in Shiga Prefecture (hospitals, fire departments, and police) were involved in 94 suicide attempts, including 54 attempted suicides and 40 completed suicides. The number of suicide attempters attended to by public relief agencies was found to be about 1.35 times the number of suicides, suggesting that a system of both hardware and software to support suicide attempters could be established if the number of suicide attempters was assumed to be 30 to 40% larger than that of suicides.

## II. Support for Suicide Attempters by Administrative Organs and Their Achievements

### 1. Outline of Assistance Program for Suicide Attempts

Since 2008, several regions and cities in Shiga Prefecture have implemented measures to prevent suicide attempt survivors from attempting suicide again, such as the Hikone City Suicide Attempter Prevention Network Project in 2011, the Otsu City Life Connecting Counselor Dispatch Project in 2013, the Higashiomi Region Suicide Attempter Support Liaison System and the Konan Life Support Counseling Project in 2014, and the Koka Health Center and Public Hospital Suicide Attempter Support Project in 2014. Currently, all regions in the prefecture have a support network that includes emergency response organizations (police, fire departments, and emergency hospitals), local support organizations (cities, towns, and public health centers), and suicide prevention promotion centers.

When a suicide attempter is transported to a designated emergency hospital in the area, hospital staff explain the suicide attempter support program to the suicide attempter and his/her family using leaflets in the emergency department of the hospital. After obtaining consent from the suicide attempter or his/her family, the hospital emergency department contacts the

administrative suicide attempter support staff of the city, town, or health center by phone or fax and informs them of the information of the suicide attempter and his/her family. If the person attempting suicide is hospitalized, the staff member will interview the attempted suicide victim or his/her family at the hospital, or if the person has returned home, the staff member will visit the victim or his/her family at home or request a visit to their office and confirm the background of the suicide attempt, sort out the problems the person is facing, and formulate a support policy. When suicidal ideation persists or psychiatric symptoms are strong, the patient is referred to a local psychiatric hospital or clinic. After the psychiatric symptoms have subsided, the patient will receive continuous support through the cooperation of necessary organizations such as local livelihood support organizations, welfare organizations, long-term care insurance organizations, labor and education related organizations, judicial organizations, and the family psychiatric institution. Feedback is provided to emergency hospitals on the status of support provided by related organizations after discharge from the hospital 7).

## 2. Results of the Support Program for Suicide Attempters in Shiga Prefecture

The table below summarizes the results of Shiga Prefecture's projects for assisting persons who have attempted suicide. Although the names of the programs and their members differ by region, they provide support in accordance with the characteristics of each region. In 2017, more than 130 cases were assisted throughout the province.

## 3. Background of Suicide Attempters and Psychiatric Care

The following is a profile of suicide attempters in the Kusatsu area, which has the largest number of suicide attempters in the Suicide Attempter Support Program. One hundred and fifty-five people in total were reported from emergency hospitals from 2014 to 2017. Figure 2 shows trends by year, and Figure 3 shows age and sex. The age of the patients up to 40 years old accounts for 70% of the total, and 70% of the patients are female. Figure 4 shows the means of suicide attempts by age group. The most common means of suicide attempts were (1) taking large doses of prescription drugs, (2) knives (wrist cutting, and so on), (3) hanging oneself, and (4) taking large doses of over-the-counter drugs, in descending order. 60% of the patients had a mental illness, and 90% of them were outpatients.

In about half of the cases, consent for assisting suicide attempters was

obtained at emergency hospitals, and the reasons for not obtaining consent were: 1) the patient returned home before the project could be explained, 2) the patient was receiving treatment at a psychiatric hospital and did not wish to receive it, 3) there were other places to consult, and 4) the patient did not want his/her family to know.

#### 4. Evaluation and Issues of the Support Project for Suicide Attempters

The Shiga Prefecture Suicide Attempter Support Program started in 2011 by emergency response organizations and local support organizations is now being implemented in all areas of the prefecture. Since 2014, the Shiga Prefecture Support System for Suicide Attempters Review Conference has also been held regularly, providing a forum for reporting on the development of projects that reflect the characteristics of the region. About 30 people, including representatives of psychiatric hospitals, psychiatric clinics, public health centers, city departments, staff of emergency hospitals, prefectural government departments, and mental health welfare centers, gather to report on the current situation and exchange opinions on issues. They discuss manuals that make use of the efforts of preceding regions, how to provide support beyond the region, and other issues. As evaluations of the project, the following points were noted: 1) A

network was established among emergency hospitals, public health centers, cities and towns, police, fire departments, and other related organizations in a face-to-face manner, and the system has been enhanced; 2) Awareness change in emergency hospitals and community support organizations is occurring, leading to increased consent rates for support and community support; 3) The contact points of local support organizations have been clarified and the number of organizations to collaborate in support has expanded; Issues include: (1) not all of the reports of attempted suicides have yet come up to health centers, cities, and towns, (2) improving the skills of support personnel, such as risk assessment and response techniques for suicide attempts, (3) timing the start and end of support, (4) ensuring a system to contact the local public health center for cases transported beyond the local area, and (5) involvement of bereaved families and staff after the suicide of a patient that was being handled by a support organization.

By implementing projects in all prefectures to support persons who have attempted suicide, suicide prevention measures can be developed in a common direction, and a support network for regional mental health and medical welfare can be established.

### III. Cooperation between Psychiatry and Community Health and Welfare in Suicide Prevention

#### 1. Daily psychiatric care

The first contribution that routine psychiatric care can make to municipal suicide prevention plans is routine psychiatric treatment. Since a large number of suicide attempters are mentally disabled and psychiatric outpatients, further enhancement of psychiatric care is expected. Appropriate medical treatment, understanding of the patient's condition, and confirmation of suicidal ideation are required. Since the most common method of suicide attempts is overmedication with prescription drugs, it is important to take measures such as optimal prescribing, checking medication status and residual medication, adjusting the amount of one-time prescriptions, and cooperation from family members and family pharmacies. In addition to medical factors such as depression, various environmental and cultural factors are involved in the background of suicide. It is difficult to deal with suicide through the medical model alone, and it is necessary to provide support in the fields of health, medicine, welfare, education, labor, and other multidisciplinary and multiorganizational settings 5). Support for bereaved families left

behind by suicide is also necessary, depending on the situation.

#### 2. Cooperation between emergency hospitals, psychiatric hospitals, and psychiatrists

In Shiga Prefecture, when a patient under psychiatric care is transported to a designated emergency hospital for overdose treatment, the hospital to which the patient was transported or an institution involved in the aforementioned suicide attempt support program provides information on suicide attempts to the patient's attending psychiatrist. The attending psychiatrist informs the destination hospital physician of the patient's treatment status, and in some cases, may even go to the hospital for an interview. They conduct case studies of patients who have made multiple suicide attempts or have family or environmental problems in the local emergency hospital. The activities of psychiatrists in emergency hospitals can strengthen cooperation with emergency medical staff, and are useful in daily interactions with patients.

The number of psychiatrists and psychiatric hospitals/clinics in this prefecture is lower than that of other prefectures in Japan, and it takes a long time to make an appointment for an initial consultation. Clinics in some areas of the prefecture have begun to give patients involved in the Suicide

Attempt Support Project priority for earlier consultation as psychiatric emergencies. They are able to get the information they need from local support organizations and receive non-medical support.

Each municipality has its own emergency psychiatric care system that is tailored to the characteristics of the community. In many municipalities, psychiatric institutions, public health centers, psychiatric emergency information centers, police, fire departments, and other related organizations work together to provide prompt and appropriate medical care and protection for mentally disabled persons in need of emergency medical care. Most of the systems are designed to deal with cases of harm caused by hyperactivity or agitation due to pathological experiences, and it is still difficult to deal with cases of suicide attempts and self-injury, for which physical treatment takes precedence. Although cooperation between emergency hospitals and psychiatric hospitals and clinics at the level of daily treatment has been progressing, the system has not yet reached the point where it can actively and reliably bridge the gap, and this is a nationwide problem.

3. Cooperation between psychiatrists and physical doctors, and community

health and welfare activities for other related institutions

Among the important measures for the time being in the comprehensive measures against suicide, "securing, training, and improving the quality of human resources for suicide prevention" is listed. It is expected that the training sessions for family doctors to improve their ability to cope with depression and the activities of medical associations will be used to teach the use of sleeping pills and antidepressants, and to provide supervision in medical treatment. The creation of face-to-face relationships and case study meetings as a network of general physicians and psychiatrists (commonly known as G-P-Net) are spreading nationwide. In addition, as measures for maternal mental health, a close relationship between obstetricians and psychiatrists is required, linked to measures against postpartum depression and abuse. The priority policy of "ensuring access to appropriate mental health and medical welfare services" includes measures for high-risk individuals such as alcoholism and gambling addiction. It is desirable to create a network in the community, such as screening for alcohol dependence at general medical institutions, followed by brief intervention to modify drinking behavior and referral to specialized treatment when necessary (SBIRTS) 1).



Psychiatrists, as specialists in depression treatment and suicide prevention, are also expected to play a role as instructors in gatekeeper training programs.

#### 4. Cooperation with other fields

Among the important measures are "the development of an environment that supports mental health and the promotion of mental health", "further promotion of measures against suicide due to work-related problems", and "further promotion of measures against suicide among children and youth". As psychiatrists with the roles of industrial physicians and school physicians, they are expected to create networks with non-medical fields, take a health and preventive medicine approach, and provide consultation for cases.

#### 5. Case study meetings at public health centers and related organizations

In daily cooperation with community health and welfare activities, psychiatrists have opportunities to receive mental health and welfare consultations at public health centers. It is also important for psychiatrists to participate in case conferences held at related institutions to provide medical assessment for cases that are difficult to deal with by public health and welfare services. When a suicide has occurred, it is possible to prevent burnout among those involved by reviewing the support

provided. Support for supporters is also an important role.

#### 6. Participation in Suicide Prevention Councils

This is the most direct contribution that psychiatrists can make to municipal suicide prevention plans. We should participate in suicide prevention meetings, and actively communicate our ideas on suicide prevention from a psychiatrist's point of view. The meetings will be based on statistical data on suicide and expert opinions, and plans will be formulated based on regional characteristics.

#### Conclusion

The government is promoting the Fifth Welfare Plan of people with Disabilities and the Seventh Medical Care Plan based on the policy principles of "establishment of a comprehensive community care system for the mentally disabled" and a "medical coordination system that can respond to various mental disorders". Suicide prevention is not only based on the "Basic Law on Suicide Countermeasures". It is expected that various laws and systems related to psychiatry will be organically linked to reduce the number of suicides in the overall promotion of psychiatric care.

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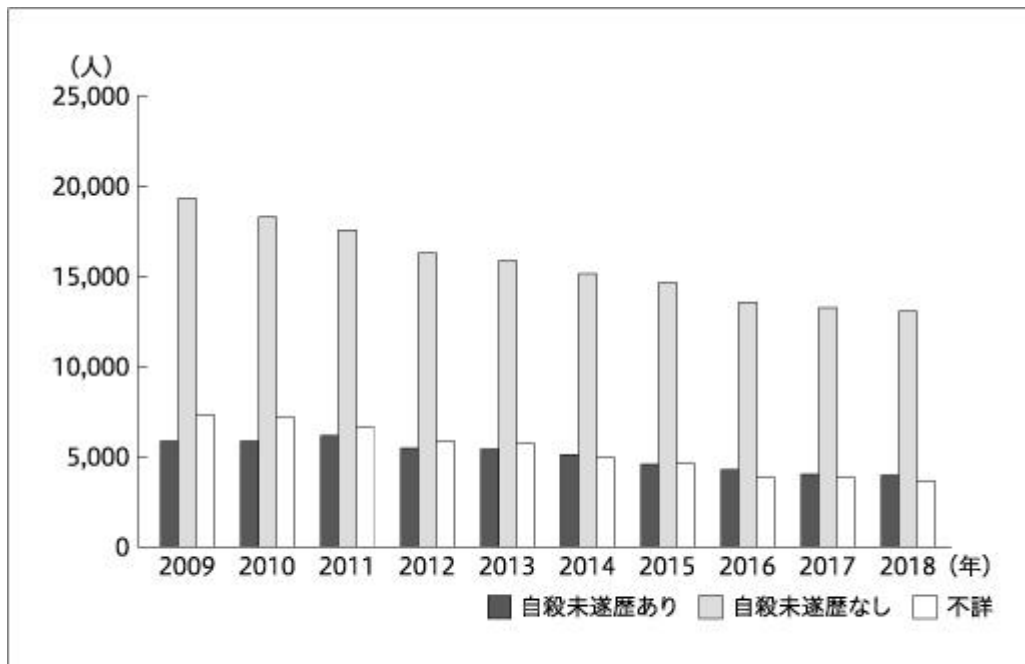


図1 全国の自殺未遂歴有無別自殺者数  
(文献3より作成)

Figure 1 Number of suicides nationwide by history of suicide attempts  
(Compiled from Reference 3)

Legend: suicides with a history of attempts / suicides without a history of attempts  
/ unknown

表 自殺未遂者支援事業の実績など

圏域	人口など	事業名	実績
大津	人口：約 34 万人 救急告示病院：6 精神科病院：5	いのちをつなぐ相談員派遣事業 2013 年 6 月～	2013 年 17 人 2014 年 16 人 2015 年 23 人 2016 年 23 人 2017 年 28 人
草津	人口：約 34 万人 救急告示病院：6 精神科病院：2	湖南いのちサポート相談事業 2014 年～	2014 年 22 人 2015 年 34 人 2016 年 35 人 2017 年 27 人
甲賀	人口：約 15 万人 救急告示病院：4 精神科病院：1	甲賀圏域における自殺未遂者支援事業 2014 年～	2014 年 3 人 2015 年 7 人 2016 年 12 人 2017 年 23 人
東近江	人口：約 23 万人 救急告示病院：6 精神科病院：2	東近江圏域自殺未遂者支援事業 2014 年～	2014 年 7 人 2015 年 3 人 2016 年 3 人 2017 年 10 人
彦根	人口：約 15 万人 救急告示病院：4 精神科病院：1	(1) 彦根市自殺未遂者対策ネットワーク事業 (2) 湖東圏域自殺未遂者支援事業 (1) 2011 年～ (2) 2017 年 12 月～	(1) の実績 2015 年 36 人 2016 年 38 人 2017 年 35 人 (2) の実績 ※彦根市分は (1 と重複有) 2017 年 14 人
長浜	人口：約 16 万人 救急告示病院：3 精神科病院：2	湖北いのちのサポート事業 2017 年 4 月～	2017 年 14 人
高島	人口：約 5 万人 救急告示病院：2 精神科病院：0	高島いのちサポート事業 2017 年 1 月～	2017 年 4 人

Table Performance of suicide attempt assistance programs

Area/Population/Project name/Results

Otsu

Population: approximately 340,000

Emergency hospitals: 6

Psychiatric hospitals: 5

(the Otsu City) Life Connecting Counselor Dispatch Project

From June 2013-

2013: 17 persons  
2014: 16 persons  
2015: 23 persons  
2016: 23 persons  
2017: 28 persons

#### Kusatsu

Population: approximately 340,000  
Emergency hospitals: 6  
Psychiatric hospitals: 2  
the Konan Life Support Counseling Project  
From 2014-  
2014: 22 persons  
2015: 34 persons  
2016: 35 persons  
2017: 27 persons

#### Koka

Population: approximately 150,000  
Emergency hospitals: 4  
Psychiatric hospitals: 1  
The Koka Health Center and Public Hospital Suicide Attempter Support Project  
From 2014-  
2014: 3 persons  
2015: 7 persons  
2016: 12 persons  
2017: 23 persons

#### Higashiomi

Population: approximately 230,000  
Emergency hospitals: 6  
Psychiatric hospitals: 2  
Support project for suicide attempters in the Higashiomi area -  
2014-  
2014: 7 persons  
2015: 3 persons

2016: 3 persons

2017: 10 persons

#### Hikone

Population: approximately 150,000

Emergency hospitals: 4

Psychiatric hospitals: 1

(1) The Hikone City Suicide Attempter Prevention Network Project

(2) Koto area support project for suicide attempters

(1) From 2011

(2) From December 2017–

Results of (1)

2015: 36 persons

2016: 38 persons

2017: 35 persons

Results of (2)

\*The Hikone City portion is duplicated in (1)

2017: 14 persons

#### Nagahama

Population: approximately 160,000

Emergency hospitals: 3

Psychiatric hospitals: 2

Kohoku life support project

From April 2017–

2017: 14 persons

#### Takashima

Population: approximately 50,000

Emergency hospitals: 2

Psychiatric hospitals: 0

Takashima life support project

From January 2017–

2017: 4 persons

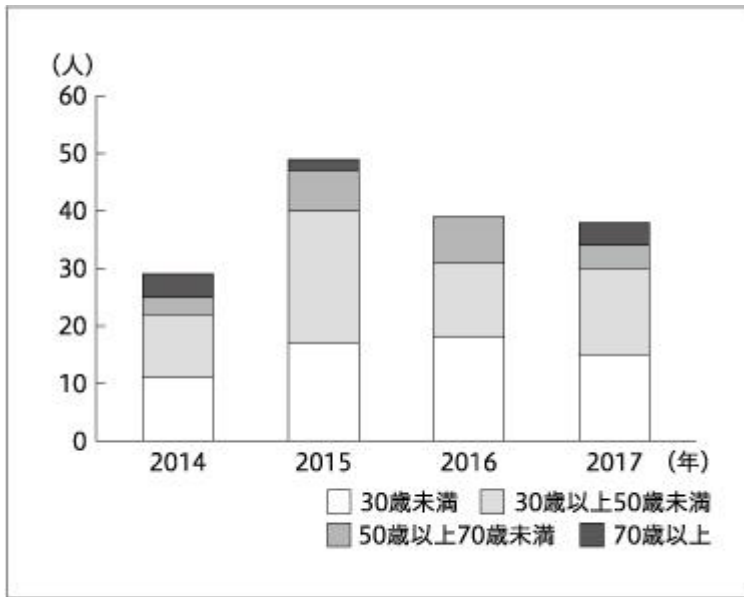


図2 自殺未遂者の推移

Figure 2 Changes in the number of suicide attempts

Legend: below ages 30 / from ages 30 and more to below 50 / from ages 50 and more to below 70 / over 70

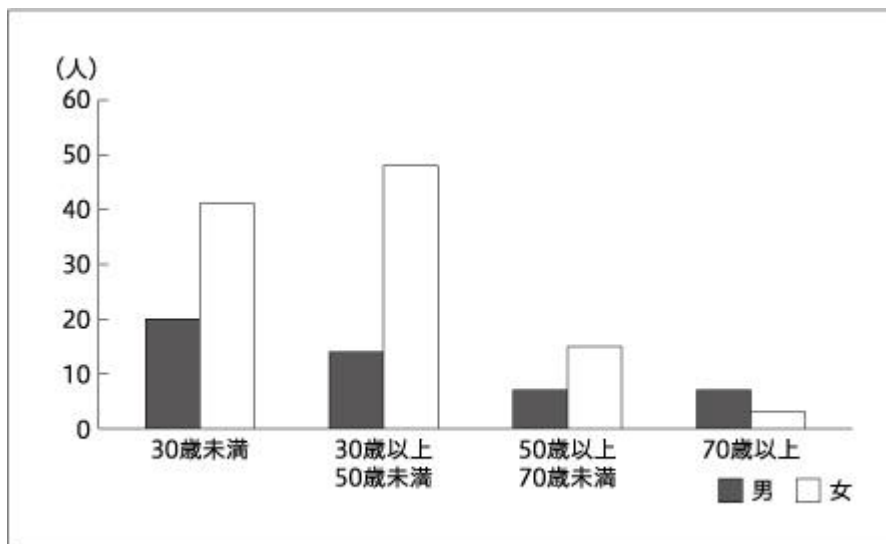


図3 自殺未遂者の年代・性別

Figure 3 Age and sex of suicide attempters

Legends; male / female

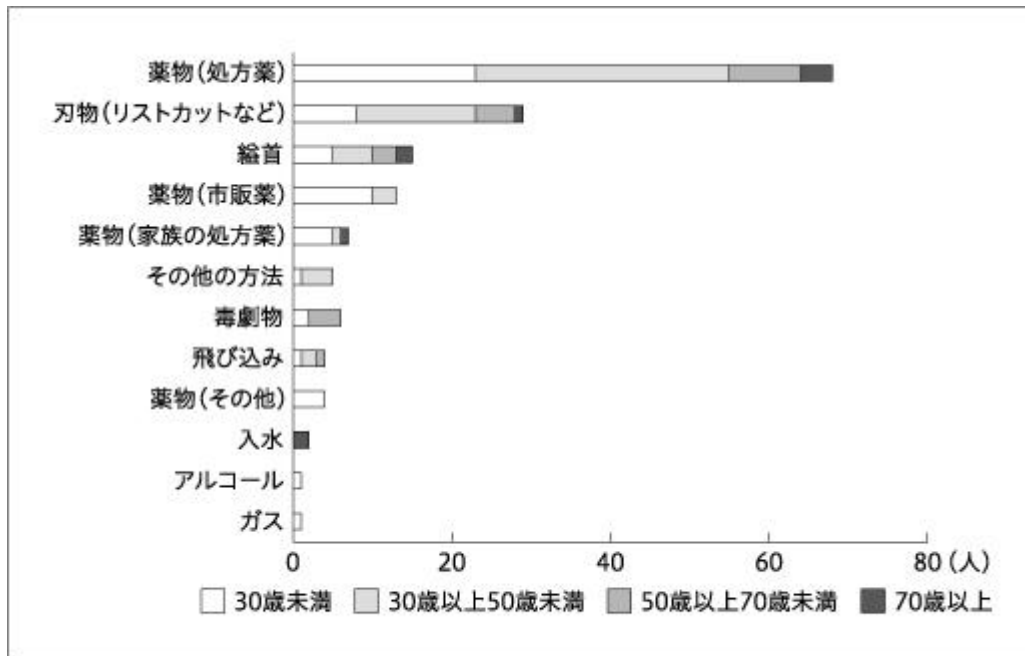


図 4 自殺企図手段

Figure 4 Means of suicide attempts

- Drugs (prescription drugs)
- Knives (wrist cuts and so on)
- Suicide by hanging
- Drugs (over-the-counter)
- Drugs (family prescription drugs)
- Other methods
- Poisonous and deleterious substances
- Suicide by jumping
- Drugs (other)
- Suicide by drowning
- Alcohol
- Gas

Legend; below ages 30 / from 30 and more to under 50 / from 50 and more to under 70 / over 70