

in Japan. It was also used to survey the current level of sexual activity and relevant factors among Japanese junior high school and high school students in 2007 [27]. For each item, a participant was instructed to select one of four options: (1) strongly agree, (2) agree, (3) disagree, and (4) strongly disagree.

Attitude to rejecting sexual intercourse

Currently, there is no validated Japanese version of scales that can measure attitudes to sexual intercourse. Therefore, two original questions were devised to assess the attitude of junior high school students to rejecting sexual intercourse. In the present study they were used as single and separate questions.

These two questions were as follows:

1. Attitude to rejecting sexual activity

“What do you think about having sex when you are in junior high school?” For this question, students selected one answer from two alternatives: “I do mind (reject sexual activity).” or “I don’t mind (accept sexual activity).”

2. Confidence about rejecting sexual advances

“Do you have the confidence to reject sexual advances when you are asked?” For this question, students selected one answer from two alternatives; “Yes (I have the confidence to reject advances)” or “No (I do not have enough confidence to reject advances).”

High-risk behavior (alcohol consumption, cigarette smoking, and sexual intercourse)

Inoue et al. [6] have shown that smoking and drinking have an influence on the sexual behavior of both boys and girls in Japan. We used the following three original questions to evaluate high-risk behavior before and 3 months after intervention with respect to alcohol consumption, cigarette smoking, and sexual intercourse during the past 3 months. (1) Have you consumed alcohol within the last 3 months? (2) Have you smoked within the last 3 months? (3) Have you had sexual intercourse within the last 3 months? The α -coefficient for assessing the reliability of these questions was 0.61. In the present study, we used these questions singly and separately.

Statistical analysis

Data were collected at two points in time and thus provided repeated measures of the frequency of communication about AIDS, the knowledge of HIV/AIDS, self-esteem, and

behavior. The mean and standard deviation of the total score were calculated for each scale. The frequency of communication about AIDS, knowledge of HIV/AIDS, and self-esteem were compared between baseline and 3 months after intervention in the intervention group and the control group by using Student’s *t*-test. We also analyzed the attitude to sexual intercourse and the rates of alcohol consumption, cigarette smoking, and sexual activity using the χ^2 test. In addition, we compared the frequency of communication about AIDS; knowledge of HIV/AIDS; self-esteem; attitudes to sexual intercourse; and the rates of alcohol consumption, cigarette smoking, and sexual activity between the intervention group and the control group at baseline and follow-up. Repeated measures were treated as an additional level in multilevel analysis. In order to assess whether there was a significant interaction effect between measures of the effect of intervention and gender, three-way analysis of variance (ANOVA) was performed.

Multiple regression analysis was used to analyze numerical data (the frequency of communication about AIDS, knowledge of HIV/AIDS, and self-esteem) for each gender. Logistic regression models were used to analyze categorical variables (attitude to sexual intercourse and the rates of alcohol consumption, cigarette smoking, and sexual activity) for each gender. Two types of significance data are provided, which are the results of tests indicating whether the difference of each variable between baseline and follow-up was statistically significant for each gender, and tests indicating whether the impact of intervention was statistically significant for each gender. The Statistical Package for the Social Sciences (SPSS 14.0) was employed for all analyses. Significance of differences was accepted at $p < 0.05$. When logistic regression analysis was performed, the odds ratio and the 95% confidence interval were calculated to assess the differences between baseline and follow-up, as well as the differences between the intervention group and the control group.

Results

Survey findings

Table 3 shows the survey results (mean scores and percentages) at baseline and follow-up for the intervention group and the control group. The questionnaire was completed before intervention by 423 students (86.3%) who gave informed consent to the survey. There were 211 males (49.9%) and 212 females (50.1%). The mean age of the 423 students before intervention was 13.7 ± 0.45 years (mean \pm SD). At the intervention group schools, there were 192 students, of whom 164 (85.4%) gave informed consent and took part in the survey, including 87 males

Table 3 Comparative knowledge, self-esteem, attitudes, and behavior among the adolescent intervention group and control group from baseline to follow-up

Number of subjects at baseline and follow-up Overall (male/female)	Intervention		Baseline versus follow-up <i>p</i> value	Control		Baseline versus follow-up <i>p</i> value	Interaction	
	Baseline	Follow-up		Baseline	Follow-up		Baseline follow-up <i>p</i> value	Gender <i>p</i> value
Frequency of communicating about AIDS								
Talking with parents mean [(SD) min–max]	1.2 (0.4) 1–3	1.2 (0.6) 1–3	0.179	1.3 (0.5) 1–3	1.3 (0.6) 1–3	0.117	0.768	0.181
Talking with teachers mean [(SD) min–max]	1.2 (0.5) 1–4	1.7 (0.9) 1–4	<0.001	1.4 (0.7) 1–4	1.6 (0.6) 1–4	0.056	<0.001	0.012
HIV/AIDS knowledge mean [(SD) min–max]	6.5 (2.1) 0–10	8.1 (1.6) 3–10	<0.001	6.8 (2.3) 0–10	7.8 (1.7) 1–10	<0.001	0.028	0.026
Self-esteem mean [(SD) min–max]	24.4 (5.0) 10–37	26.2 (5.0) 16–40	0.003	24.3 (5.4) 10–37	24.8 (5.4) 10–40	0.298	0.107	0.056
Attitude to sexual intercourse								
Rejection of sexual activity (%)	79.6	86.0	0.199	81.9	77.1	0.235	0.034	0.030
Confidence in rejecting sexual advances (%)	82.2	73.6	0.130	79.0	79.7	0.904	0.186	0.440
Risky behavior								
Alcohol use (%)	13.1	15.2	0.735	21.2	17.7	0.356	0.463	0.008
Cigarette tobacco use (%)	1.9	1.5	1.000	4.9	3.9	0.660	0.857	0.737
Sexual activity (%)	0.7	1.5	1.000	1.7	1.5	1.000	0.538	0.584

Analyses used Student’s *t*-test or the χ^2 test for differences in each characteristic between baseline and follow-up. Three-way analysis of variance (ANOVA) was used for analysis in order to assess whether there was a significant interaction effect between measures of the effect of intervention and gender

(53.0%) and 77 females (47.0%). At the control group schools, there were 298 students, of whom 259 (86.9%) gave informed consent to the survey, including 124 males (47.9%) and 135 females (52.1%). Of the 423 students who participated in the survey before intervention, 371 (88.8%) participated in the second survey at 3 months after intervention, including 135 students (82.3%) from the intervention group and 236 students (91.1%) from the control group.

Effect of intervention

We compared the results between baseline and follow-up for the intervention group (Table 3). The frequency of communication about AIDS with parents did not change for either the intervention group or the control group. However, the frequency of communication about AIDS with teachers increased in the last 3 months for the intervention group ($p < 0.001$). After 3 months, in the intervention group, the mean scores for HIV and AIDS knowledge ($p < 0.001$) and for self-esteem ($p = 0.003$) were significantly higher than at baseline. When we

compared the results between baseline and follow-up for the control group, the mean scores for HIV and AIDS knowledge ($p < 0.001$) were significantly higher than at baseline. Both the intervention and control groups showed some positive results at the baseline and follow-up.

There was a significant interaction effect of the intervention involving an impact on the frequency of communication about AIDS with teachers ($p < 0.001$), HIV/AIDS knowledge ($p = 0.028$), and refusal of sexual activity ($p = 0.034$). In addition, there was a significant interaction effect of gender with an impact on the frequency of communication about AIDS with teachers ($p = 0.012$), HIV/AIDS knowledge ($p = 0.026$), refusal of sexual activity ($p = 0.030$), and alcohol use ($p = 0.008$).

Influence of gender

For males and females in both groups, results were compared between baseline and follow-up by multiple regression models or logistic regression models (Table 4). For males and females in both groups, the frequency of communication about AIDS with parents did not change.

At follow-up, for males and females in the intervention group and females in the control group the frequency of communication about AIDS with teachers increased in the last 3 months. Also, the interaction with the intervention was significant among females for the impact on the frequency of communication about AIDS with teachers ($p = 0.027$).

The scores for HIV and AIDS knowledge ($p < 0.001$) at follow-up were significantly higher than those at baseline in males from both groups. However, the interaction with the intervention was not significant for males with respect to HIV and AIDS knowledge. The scores for HIV and AIDS knowledge were significantly higher at follow-up in girls from the intervention group ($p < 0.001$) and the control group ($p = 0.019$). Also, the interaction with the intervention was significant for the impact on HIV/AIDS knowledge in females ($p = 0.023$).

The score for self-esteem was significantly higher at follow-up than at baseline in females from the intervention group ($p = 0.029$) and the control group ($p = 0.036$). However, no significant interaction of self-esteem with the intervention was detected for either gender. In addition, the percentage of males refusing sexual activity was significantly lower ($p = 0.020$) at follow-up than at baseline in the control group. However, boys from the intervention group showed a higher refusal rate of sexual activity at follow-up than at baseline. Intervention had a significant impact on refusal of sexual activity by males ($p = 0.045$). The intervention had no significant impact on other variables in either males or females.

Discussion

This study suggested that adolescents showed more positive changes in measures of attitudes to sexual activity and HIV/AIDS knowledge with an expanded intervention education program for students, parents, and school teachers. There were gender differences in the effects of the intervention. Among females, the intervention had a significant impact on the frequency of communication about AIDS with teachers and HIV/AIDS knowledge, and in males it had a significant impact on refusal of sexual activity.

We consider that the differences between males and females might be related to communication and differing values about sexual activity between male and female adolescents in Japan. It has been reported that the percentage of students who have had sex increases with age among Japanese junior high school and high school students, and young males who are sexually active and have strong sexual desires take a greater interest in sex and are more positive toward sexual behavior than young females

who are passive with respect to sex [2]. For female students who only had a slight interest in sex, a program that addressed their questions and concerns by increasing the opportunities for education from teachers was more effective for providing accurate knowledge than group education only. The present study showed that for females in the intervention group, the frequency of communication about AIDS with teachers had increased at the 3 month follow-up compared with this communication after group education for students. On the other hand, male students were more likely to have a strong interest in sex, so that even group education led to an improvement of knowledge. Among the young females with a higher risk of pregnancy and sexual abuse, the percentage of students refusing sex was increased by group education in both the intervention and control groups. On the other hand, among the young males showing a decrease in rejection of sex with age, there was an increase in the percentage of students refusing sex that was probably due to the intensified education provided by this program (including education for teachers, as well as individual counseling).

Kirby et al. [28] created a School Health Promotion Council that consisted of school teachers, students, parents, administrators, and members of the community. They reported an increase in the number of male students who used condoms after intervention by Council programs, but they also reported there was no effect on female students. Flay et al. [29] conducted a School Community Intervention Program that lowered the rate of increase in sexual activity among male students aged 10–13 and also increased condom use, although these effects were not observed among female students. The results of such studies indicate that there is a limit to the effectiveness of group education for preventing HIV infection because of the influence of student attitudes, gender, and individual differences in sexual behavior. It has been reported that the effects of these programs show differences between males and females. For example, an education program designed to increase the use of condoms had a definite effect in males, but was ineffective in females.

In the sex education program delivered by life skill training for junior high school students in Japan, nine educational sessions of different styles conducted by medical experts and school staff were compared. Significant improvements were seen in self-esteem, willingness to study, and attitudes toward sexual information among male students, as well as in willingness to study and attitudes toward sexual information among female students [30]. Thus, it was clarified that an intervention with the program had an effect on self-esteem, willingness to study, and the attitude to sexual information among males, as well as on study and the attitude to sexual information among females.

Table 4 Comparison of knowledge, self-esteem, attitudes, and behavior between intervention group and control group and between baseline and follow-up among male and female students

Number of subjects at baseline and follow-up (male/female)	Intervention			Control			Intervention versus control		
	Baseline (87/77) versus follow-up (80/55)			Baseline (124/135) versus follow-up (115/121)			Baseline follow-up × intervention		
	Estimate	95% CI	<i>p</i> value	Estimate	95% CI	<i>p</i> value	Estimate	95% CI	<i>p</i> value
Frequency of talking with parents about AIDS									
Male	0.035	(−0.104 to 0.175)	0.616	0.034	(−0.095 to 0.164)	0.600	0.001	(−0.192 to 0.194)	0.992
Female	0.143	(−0.041 to 0.327)	0.126	0.124	(−0.026 to 0.275)	0.106	0.019	(−0.230 to 0.268)	0.882
Frequency of talking with teachers about AIDS									
Male	0.372	(0.145 to 0.599)	0.001	0.168	(−0.015 to 0.350)	0.072	0.204	(−0.084 to 0.493)	0.164
Female	0.710	(0.496 to 0.924)	<0.001	0.367	(0.179 to 0.555)	0.001	0.343	(0.039 to 0.646)	0.027
HIV/AIDS knowledge									
Male	1.838	(1.255 to 2.421)	<0.001	1.358	(0.792 to 1.924)	<0.001	0.480	(−0.348 to 1.308)	0.255
Female	1.513	(0.898 to 2.128)	<0.001	0.579	(0.094 to 1.064)	0.019	0.934	(0.131 to 1.737)	0.023
Self-esteem									
Male	1.269	(−0.204 to 2.742)	0.091	−0.409	(−1.876 to 1.059)	0.584	1.678	(−0.466 to 3.822)	0.125
Female	2.005	(0.207 to 3.804)	0.029	1.408	(0.091 to 2.725)	0.036	0.597	(−1.651 to 2.845)	0.602
Rejection of sexual activity									
Male	OR = 1.298	(0.587 to 2.868)	0.519	OR = 0.446	(0.225 to 0.883)	0.020	OR = 2.910	(1.022 to 8.286)	0.045
Female	OR = 2.673	(0.809 to 8.832)	0.107	OR = 1.236	(0.633 to 2.413)	0.536	OR = 2.163	(0.550 to 8.512)	0.270
Confidence in rejecting sexual advances									
Male	OR = 0.586	(0.267 to 1.287)	0.183	OR = 0.858	(0.436 to 1.691)	0.659	OR = 0.683	(0.242 to 1.929)	0.471
Female	OR = 0.650	(0.254 to 1.660)	0.368	OR = 1.263	(0.647 to 2.468)	0.494	OR = 0.515	(0.163 to 1.629)	0.259
Alcohol use									
Male	OR = 2.133	(0.842 to 5.403)	0.110	OR = 1.227	(0.663 to 2.269)	0.515	OR = 1.739	(0.570 to 5.300)	0.331
Female	OR = 0.587	(0.208 to 1.657)	0.314	OR = 0.454	(0.222 to 0.929)	0.031	OR = 1.291	(0.366 to 4.555)	0.692
Cigarette tobacco use									
Male	OR = 1.105	(0.152 to 8.040)	0.921	OR = 0.857	(0.254 to 2.891)	0.803	OR = 1.290	(0.126 to 13.226)	0.830
Female	OR = 000	–	0.998	OR = 0.725	(0.199 to 2.633)	0.625	OR = 000	–	0.998
Sexual activity									
Male	OR = 000	–	0.997	OR = 0.673	(0.110 to 4.107)	0.668	OR = 000	–	0.997
Female	OR = 000	–	0.998	OR = 1.05	(0.067 to 17.539)	0.954	OR = 000	–	0.997

Multiple regression analysis or multiple logistic regression analysis was used for analysis

OR odds ratio, CI confidence interval

Saito et al. [7] have reported that individualized counseling in response to student requests requires coordination with medical institutions. In addition to counseling by nurse teachers at schools, regular visits by medical and healthcare personnel to schools are recommended to provide counseling on specific issues related to sexual intercourse. Similarly, counseling provided by the local community is advised. However, these activities are not sufficiently available in Japan. In the present study, we provided an extended program, with parental training, teacher training, more education for adolescents, and individual counseling for students who had questions or concerns about the information they received. As a result of the individual counseling, we discovered some students with incorrect knowledge about the routes of HIV infection and prevention of infection. We also discovered that male students who accepted sexual intercourse at junior high school believed that their peers also accepted sex. Further, we found that male students who lacked the confidence to refuse sex also wanted to have sexual intercourse if they had the opportunity. It was possible that some of the students who were having sexual intercourse could contract STDs. For students who had begun sexual activity, we provided education about HIV/STDs, explained the need for testing, and recommended that they undergo testing at a public health center or medical institution.

Small-group adolescent discussion and individualized education showed us how the students were influenced by the values of their peers and how this shaped their attitude to sexual intercourse. Male students also reported that the behavior of their peers contributed greatly to the decision about when to have sex for the first time. Larsson and Svedin [31] reported that adolescents began sexual relations with partners close to their own age, and that 93% of young people first had sex with someone within 2 years of their own age. Further, Papadopoulos et al. [32] reported that most adolescent females initially did not think they would have sexual intercourse when engaged in social interaction with a male, but had sexual intercourse unexpectedly. It is necessary to emphasize to students involved in male–female interactions the ever-present risk of unwanted pregnancy and STDs caused by sexual intercourse as a way of reducing such risks.

A previous Japanese study showed that high school students who received peer counseling by university students had a higher sense of self-esteem than adolescents who did not receive such counseling. However, the risks of pregnancy and STDs were not significantly lower than those in the adolescents without such education [33]. We believe that an individualized approach to students by school nurses or medical professionals is required. During our individual counseling sessions, we informed the students that more of their peers disapproved of sexual activity than approved.

Accordingly, the significant increase in male students who rejected sexual activity after individual education may have occurred because they recognized that their preconceived ideas about sexual behavior were erroneous. We also suggested to the students during their individual education sessions that they should not rush into sexual activity because it was easy for adolescents to have sexual intercourse with someone close to their own age, but that there was a risk of unwanted pregnancy and STD as a result of such relations. The present study suggested that a stronger and persistent influence on adolescents was achieved through multiple methods of intervention, including education for teachers and individual counseling.

The frequency of communication about AIDS with parents did not change for either males or females in our study. Takedomi et al. [34] reported that Japanese parents of new college students answered that they could easily discuss physical growth and pregnancy with their children, but they answered that it was difficult to discuss HIV/AIDS, sexual behavior, and contraception for children younger than 18 years old. There is a negative feeling about communication on sexual matters between parents and adolescents because sex and sexual relations are topics less easily discussed between parents and adolescents and between men and women in Japan than elsewhere. In addition, Hiraoka [35] identified clear differences in the awareness of sex by generation between junior high school students and their parents. We consider that parents and adolescents did not conduct high-level communications about sexual matters, including AIDS, in the home because of the Japanese cultural background in which parents find it difficult to educate adolescents about sexual matters. There is particular resistance to talking about sexual matters between adolescents and parents at home in Japan. It may be necessary to educate for parent of the child before adolescence to be able to talk about sexual matters without resistance. Based on the results of the present study, we think it is important to enhance sex education at school, and maintain good communications with each family member at home.

Furthermore, we found that the students who had begun having sexual intercourse were more likely to have problems at home, such as parents who were too lenient or too strict. It has been reported that the age of initiation of sexual activity is influenced by the parent–child relationship [5]. Saito et al. [7] stated that, when interacting with individual students, personal information should be handled with care and contact with the parents should be dependent upon agreement with the students. In the future, considering the existence of various problems with parent–child relationships, we think that it may be necessary to provide individual counseling for the parents of high-risk students.

Limitations of the study

It would have been preferable to establish a control group with absolutely no intervention, but the schools would not permit two surveys to be carried out without education also being provided to the students. After the 3-month follow-up survey, information on the control group was given to teachers and parents, and individual counseling was provided for adolescents who requested it. Because some parents and guardians did not participate in the education for parents, we provided health information sheets for all parents and guardians after the education program. To improve the participation rate of parents and guardians, a better method should be found for a future program. We asked the students about their frequency of communication about AIDS with parents for assessment before the intervention and 3 months after the intervention. However, we could not collect any data from the parents or guardians, or from the teachers. Due to the Japanese culture, parents and school teachers have a tendency to resist surveys on sexual matters and training conducted by external organizations. Future studies should investigate how to survey parents and teachers in order to devise better methods. Also, it would have been informative to conduct long-term follow-up after our intervention, but this was not possible because the participating students soon graduated from their junior high schools and moved to high schools.

Conclusion

The efficacy of an extended program of education, including education for parents and teachers, in-depth education for adolescents, and individual counseling, was evaluated among students aged 13–14 attending four public junior high schools in Saga Prefecture, Japan. Female students from the intervention group showed a better frequency of communication about AIDS with teachers, and better AIDS and HIV knowledge than female students from the control group. Male students from the intervention group showed less acceptance of sexual activity at 3 months after intervention than male students from the control group. We consider that the differences between males and females might be related to differences in communication and differing values about sex between male and female adolescents in Japan. In future, it will be important to promote adolescent education by maintaining close ties with the school and family, and by providing individual counseling that takes into consideration the sexual differences in Japanese adolescents.

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Regular Article

Increased self-transcendence in patients with intractable diseases

Rie Iwamoto, RN, MA,¹ Niwako Yamawaki, PhD³ and Takeshi Sato, MD, PhD^{2*}

¹Doctoral Programs, Faculty of Medicine, and ²Health Care Center, Saga University, Saga, Japan and ³Department of Psychology, Brigham Young University, Provo, USA

Aims: Patients with intractable disease require long-term treatment and experience repeated bouts of progressive symptoms and resolutions, which cause them severe suffering. The aim of this study was to elucidate the concepts of self-transcendence and subjective well-being in patients with intractable disease.

Methods: Forty-four patients with intractable disease (men/women: 22/22) participated. The diseases of the participants were classified into five systems: (i) neural/muscle system; (ii) digestive system; (iii) immunity/blood system; (iv) visual system; and (v) bone/joint system. The controls were 1854 healthy individuals (men/women: 935/869). Participants completed the Self-Transcendence Scale (STS) and the Japanese version of the World Health Organization-Subjective Inventory. The Japanese version of the Mini-International Neuropsychiatric Interview was also used for the intractable disease group.

Results: Analysis of covariance found a significant increase in STS score among the intractable disease group ($P < 0.001$). Multiple regression analysis showed that the positive affect measured by the World Health Organization-Subjective Inventory showed the greatest effect on the STS score for the intractable disease group ($\beta = 0.539$, $P < 0.001$).

Conclusion: As a life-changing experience, an intractable disease may influence an increase in self-transcendence. The results also showed that there was a strong correlation between self-transcendence and respondents' subjective well-being. Our results suggest that patients with life-changing intractable disease can have a high level of self-transcendence, which may lead them to regain mental well-being, and increase their psychological health even in situations that cause physical and mental suffering.

Key words: intractable disease, self-transcendence, sense of subjective well-being.

SINCE THE 1960S, the concept of one's subjective well-being has gained interest, particularly in the field of psychology,^{1,2} and past investigations have demonstrated that spirituality is an important factor for one's well-being.³ As such, the Executive Board of the World Health Organization (WHO) revised their definition of health, stating that, 'Health is a dynamic state of complete physical, mental, spiritual and social well-being and not merely the absence of

disease or infirmity.'⁴ This most recent definition is significant because spiritual well-being was added to the criteria of health. Because of this new definition, the WHO also revised the definition of palliative care. Originally, it included physical and emotional care⁵ as crucial factors for palliative care. But the recent definition extended the vital factors for palliative care to include spiritual care. Since the revision, many researchers have conducted studies to understand and identify the basic concept of spirituality.⁶

Spirituality involves self, others, environment, and transcendence^{7,8} or an integrated state.^{9,10} In the present study, self-transcendence, which is one of the components of spirituality, is the focus of the investigation. In psychiatry, the study by Cloninger *et al.*¹¹

*Correspondence: Takeshi Sato, MD, PhD, Health Care Center, Saga University, 1-Honjo, Saga-shi, Saga 840-8502, Japan. Email: satot@cc.saga-u.ac.jp

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indicated self-transcendence as an important dimension of personality. They stated that personality is characterized by the extent to which a person identifies the self as 'an autonomous individual,' 'an integral part of humanity,' and 'an integral part of the universe as a whole.' They further stated that self-transcendence is the relationship between the self and the external world as a whole (i.e. nature, universal complex, and supreme spiritual entity) and the ability to think in a creative way to appreciate art or beauty.¹¹ In countries outside of Japan, researchers in various fields have been conducting studies to elucidate the concept of self-transcendence based on the theoretical frameworks of Maslow,¹² Rogers,¹³ and Newman.¹⁴ In 1991, Reed focused on the aspect of self-transcendence among the components of spirituality.¹⁵ Through deductive improvement, she developed the Middle Range Theory of Self-Transcendence based on Rogers' conceptual system.¹⁵ According to Reed, self-transcendence is a common belief that can be seen among people in any culture, which expresses the essence of human life and is inherent in every individual. Its function is to allow people to live on their own terms by discovering the true meaning and purpose of life and dealing with their problems, even when facing unbearable situations.^{15–17} Many researchers investigated the relationship between self-transcendence and palliative care with terminally ill patients, such as patients with cancer^{16–19} and HIV,^{17,20,21} or elderly individuals.^{22,23}

In Japan, researchers also investigated the effects of self-transcendence. However, they applied the Western concept of self-transcendence to understand Japanese self-transcendence. Because history, ethnicity, culture, and other factors all influence self-transcendence, such application is problematic. Therefore, the results of past investigations of spirituality, particularly self-transcendence, using Japanese people were different from the findings that were presented in the Western literature.²⁴

Nakamura developed a psychological measure, called the Self-Transcendence Scale (STS), to evaluate self-transcendence that may fit Japanese individuals.²⁵ He defined self-transcendental experience not only in a religious context but also in everyday transcendental experiences of non-religious people. For instance, Nakamura *et al.* conducted surveys among Japanese nurses and nursing students using the STS. The results indicated that when the level of self-transcendence increased, subjective well-being increased.^{26,27} However, their studies were performed

on only healthy people, and to date, studies on people with illness have not yet been reported in Japan. Thus, the main purpose of this study was to investigate the effect of self-transcendence on the subjective well-being of patients with intractable disease.

Patients with intractable disease require long-term treatment, and they experience repeated bouts of progressive symptoms and resolution, causing them severe suffering. Therefore, it is vital to provide comprehensive support so that patients with intractable disease can improve their quality of life and pursue dignified lives.

METHODS

Participants

The group of patients with intractable disease included patients from patient organizations in Saga Prefecture (population 859 000, area 2439 km²) and Fukuoka Prefecture (population 5 056 000, area 4971 km²). The patients were followed up at an institution or their home. In the present study, the criteria of intractable diseases were taken from the Ministry of Health, Labor and Welfare in 1972.²⁸ The criteria are shown below:

- 1 Illnesses, the causes of which are not known, for which no treatment method has been established, and for which there are more than a few concerns of aftereffects.
- 2 Illnesses that become chronic and impose a severe burden on the family, not only because they cause economic hardship, but also because they require considerable personal involvement in care.

The diseases of the participants were classified into five systems based on the classifications of disease groups from the Japan Intractable Disease Information Center: (i) neural/muscle system (amyotrophic lateral sclerosis, multiple sclerosis, moyamoya disease, multiple neuritis, and Parkinson's disease); (ii) digestive system (primary biliary cirrhosis, ulcerative colitis, and Crohn's disease); (iii) immunity/blood system (Behçet's disease, systemic lupus erythematosus, rheumatism, and collagen disease); (iv) visual system (retinitis pigmentosa); and (v) bone/joint system (idiopathic osteonecrosis of femoral head and ossification of the posterior longitudinal ligament).

The survey was conducted from August 2007 to July 2009. The average age of patients with the intractable diseases was 47.2 ± 14.2 years, and there were 22 men and 22 women. The group of healthy people in this research was selected from a total of 1854 persons surveyed from August to November 2005 in Saga Prefecture (population 859 000, area 2439 km²), Fukuoka Prefecture (population 5 056 000, area 4971 km²), and Nagasaki Prefecture (population 1 453 000, area 4104 km²). These persons ranged in age from 15 to 90 years. The average age of the group of healthy people was 39.0 ± 16.6 years, and the group consisted of 935 men and 869 women.

No illnesses were found in their questionnaire at the point of this survey.

Measurements

Sociodemographic attributes

Sociodemographic attributes included age, sex, marital status, occupation, free time (per day), satisfaction with free time (three-grade scale), economic status (five-grade scale), living arrangement, and duration of illness (in years).

STS

The STS consists of 24 questions and a five-grade scale (I disagree: one point; I agree: five points). A higher score indicates a higher self-transcendence level. It includes five sub-factors: (i) vital perpetuity and transcendence; (ii) gratuitous love; (iii) one's imminent feeling with another person; (iv) true presence; and (v) one's feeling with nature. The reliability and validity of this scale have been demonstrated by Nakamura *et al.*^{25–27} Major studies using the STS have been performed on nurses,^{25,26} college students, and working adults.²⁵

WHO-Subjective Inventory

The WHO-Subjective Inventory (WHO-SUBI) is a scale for the measurement of subjective well-being.^{29,30} It contains 41 items, which are answered on 3-point scales. The WHO-SUBI measures two types of subjective well-being. One is 'positive affect', which are the indices of good psychological healthfulness (19 items), and the other is 'negative affect', which are the indices of poor psychological healthfulness (21 items). It evaluates positive and negative

aspects of 11 factors: sense of satisfaction, sense of achievement, self-confidence, sense of happiness, support of close relatives, social support, family relationships, sense of spiritual control, sense of physical ill health, and dissatisfaction with social ties. The reliability and validity of the Japanese version have been demonstrated by Ono *et al.*³¹ Major studies using the WHO-SUBI have been performed on psychiatric outpatients,³¹ cancer patients,³² patients with depression,³³ and elderly individuals.³⁴

Japanese version of the Mini-International Neuropsychiatric Interview

The Japanese version of the Mini-International Neuropsychiatric Interview (J-MINI) is a structured diagnostic interview that has been abridged to be conducted over a period of 10–20 min. It was devised to enable a reliable psychiatric diagnosis, even without the use of specialists who have received formal training and evaluation.^{35–37} The reliability and validity of the Japanese version have been demonstrated by Otsubo *et al.*^{38,39} This research uses the J-MINI interview of major depressive episodes (MDE). The J-MINI was used to divide participants into two groups: MDE group (MDE is diagnosed if five or more of the nine items are present) and non-MDE group (MDE is not diagnosed if less than five items are present). Major studies using the J-MINI have been performed on psychiatric patients³⁸ and outpatients.^{39–41}

Procedures

Before we collected data in an institution, we received the approval from the person who is in charge of the institution. The researchers conducted the surveys after the informed consent was obtained from all participants. We excluded persons who would be physically exhausted by completing the survey or who were incapable of acting on their own judgment. Answers were provided by substitutes for those who could not fill out the forms or who were completely blind. After the surveys were completed, we conducted interviews, individually in private rooms, with the participants who consented.

Statistical analysis

We performed a *t*-test to compare age and the amount of free time per day between groups. We also

performed a χ^2 -test to compare the following between groups: sex (male, female), marital status (single, married), employment status (yes, no), degree of satisfaction with free time (very satisfied, slightly satisfied, not satisfied) and living arrangement (living alone, living with others). The STS scores were compared between the intractable disease group and the control group using ANCOVA. The dependent variable was the STS score and the independent variable was the group type (intractable disease group, control subjective group). The covariates were age, sex, marital status, employment status, free time (per day), satisfaction with free time and living arrangement (number of people living with the subject).

The STS scores were compared using the non-paired *t*-test by sex (male/female: 0/1 dummy variable), employment status, marital status, living arrangement and the status from J-MINI (MDE/non-MDE: 0/1 dummy variable). The STS scores were compared using one-way ANOVA by the satisfaction with free time and classification of disease (neural/muscle system, digestive system, immunity/blood system, visual system, and bone/joint system). When one-way ANOVA was significant, the differences among subcategories within a factor were estimated using Bonferroni correction. Two-way ANOVA was used to determine whether there was an interaction between any factor and STS scores. When there was no significant interaction, multiple regression analysis was performed.

Using STS scores as a dependent variable, we conducted a multiple regression analysis with the following as independent variables: age, satisfaction with free time, duration of illness, classification of diseases, SUBI positive affect and MDE. For classification of diseases (five categories), four indicator variables (for each of neural/muscle system, digestive system, immunity/blood system, and visual system, with bone/joint system as the reference category) were created and included in the model; changing the reference category did not materially change the results. Simple comparisons of the mean STS scores were performed using a non-paired *t*-test.

We used SPSS (SPSS, Chicago, IL, USA) 17.0 for all statistical analyses with a level of significance of less than 5%.

Ethical considerations

When making a request through an institution for the survey, we informed the person in charge about the

objectives, significance, and methods of the research. We also explained that the names of the institutions and individuals would not be specified, and that the information obtained in the surveys would be used only for the research. Further, we obtained a letter of consent from the person in charge. Additionally, we explained the same information to the subjects, that their cooperation in the survey was voluntary, and that they could withdraw at any time. We also received their consent.

Before performing this survey, we received the approval for this research from the Saga Medical School Ethics Committee and the ethics committees of each of the institutions.

RESULTS

Table 1 represents a comparison of the basic attributes of the intractable disease group and the control subject group. There were no significant differences between the two groups for the categories of sex, marital status, free time per day, satisfaction with free time and living arrangement (number of people living with the subject). However, significant differences were discovered for age and employment status.

After adjusting for age, sex, marital status, employment status, free time per day, satisfaction with free time, and living arrangement, we compared STS scores between the intractable disease group and the control group using an ANCOVA analysis. The intractable disease group had significantly higher scores than did the control group (see Table 2).

Table 3 represents the STS scores by factors for the intractable disease group. There were significant differences on the STS score by age, duration of illness, MDE/non-MDE, and positive affect. There were no significant differences in the STS scores by sex, employment status, marital status, and living arrangement. One-way ANOVA was used to compare the differences in STS scores among the subcategories of satisfaction with free time (very satisfied, slightly satisfied, and not satisfied) and the differences in STS scores among the subcategories of the classification of disease. There were significant differences in the STS scores for satisfaction with free time. Multiple comparisons with Bonferroni correction showed a significantly higher STS score for 'very satisfied' with their free time in comparison to the score for 'slightly satisfied' or 'not satisfied'. There were significant differences in the STS scores for the classification of disease. Multiple comparisons with Bonferroni cor-

Table 1. Sociodemographic characteristics of intractable disease group and control subject group

	Intractable disease group (n = 44)	Control subject group (n = 1854)	Statistics
Age			
Mean	47.2 ± 14.2 (years)	39.0 ± 16.6 (years)	t (1896) = -3.24***
Sex			
Male	22 (50.0%)	935 (53.1%)	NS
Female	22 (50.0%)	869 (46.9%)	
Marital status			
Single	23 (52.3%)	934 (50.4%)	NS
Married	21 (47.7%)	920 (49.6%)	
Employment status			
Yes	19 (43.2%)	1122 (60.5%)	χ^2 (1) = 5.39*
No	25 (56.8%)	732 (39.5%)	
Free time (per day)	2.7 ± 3.0 (hours)	2.9 ± 42.7 (hours)	NS
Satisfaction of free time			
Very satisfied	5 (11.4%)	196 (10.6%)	NS
Slightly satisfied	26 (59.1%)	981 (52.9%)	
Not satisfied	13 (29.5%)	677 (36.5%)	
Living arrangement			
Alone	8 (18.2%)	377 (20.3%)	NS
1 ≥	36 (81.8%)	1477 (79.7%)	
Duration of illness (years)			
Mean	14.0 ± 10.6	-	
Classification of diseases ¹			
Neural/Muscle system	14 (31.8%)	-	
Digestive system	9 (20.5%)	-	
Immunity/Blood system	11 (25.0%)	-	
Visual system	6 (13.6%)	-	
Bone/Joint system	4 (9.1%)	-	

*P < 0.05. ***P < 0.001.

¹Based on Classification of Diseases Japan Intractable Disease Information Center.

NS, not significant.

rection showed significantly higher STS scores for the neural/muscle system and visual system compared to that for the bone/joint system. In addition, the MDE group had significantly lower scores than did the non-MDE group.

Multiple regression analysis of the data from participants was performed using variables that were sig-

nificantly associated with STS score (age, satisfaction with free time, duration of illness, classification of disease, SUBI positive affect and MDE) as independent variables and STS score as the dependent variable (see Table 4). Positive affect had the greatest effect on the STS score. There was no significant correlation between the STS score and sex, duration of

Table 2. Estimated mean scores for self-transcendence between intractable disease group and control subject group

Group	Mean ± SE	95%CI	P-value
Intractable disease group (n = 44)	89.46 ± 1.79	85.94–92.98	P < 0.001
Control subject group (n = 1854)	75.84 ± 0.28	75.30–76.38	

Model was adjusted for age, sex, marital status, employment status, free time (per day), satisfaction with free time, and living arrangement using ANCOVA.

CI, confidence interval.

Table 3. Correlation between the STS and several factors in patients with intractable disease

	n (n = 44)	STS score Mean ± SD	Statistics
Age			
17–40	14	82.6 ± 10.5	t (42) = -3.19**
≥41	30	94.9 ± 12.5	
Sex			
Male	22	93.4 ± 13.1	NS
Female	22	88.5 ± 13.0	
Employment status			
Yes	19	90.2 ± 14.2	NS
No	25	81.6 ± 12.6	
Marital status			
Single	23	89.1 ± 13.1	NS
Married	21	93.0 ± 13.2	
Living arrangement			
Alone	8	97.6 ± 7.4	NS
≥1	36	89.5 ± 13.7	
Satisfaction with free time			
Very satisfied	5	106.0 ± 5.8	F (2,41) = 4.59* a > b* a > c*
Slightly satisfied	26	90.0 ± 12.3	
Not satisfied	13	87.0 ± 13.4	
Duration of illness (years)			
1–15	28	87.6 ± 12.5	t (42) = -2.35*
≥16	16	96.8 ± 12.5	
Classification of disease			
Neural/Muscle system	14	93.7 ± 11.2	F (4,39) = 2.73* a > e* d > e*
Digestive system	9	88.8 ± 12.4	
Immunity/Blood system	11	92.9 ± 12.1	
Visual system	6	96.3 ± 12.0	
Bone/Joint system	4	72.8 ± 15.2	
J-MINI			
MDE	17	84.0 ± 15.2	t (42) = 2.79*
Non-MDE	27	95.3 ± 9.6	
SUBI positive			
41 ≤	30	86.9 ± 12.9	t (42) = -3.30**
≥42	14	99.6 ± 9.1	
SUBI negative			
47 ≤	28	88.4 ± 14.4	NS
≥48	16	95.4 ± 9.4	

*P < 0.05. **P < 0.01.

J-MINI, Japanese version of Mini-International Neuropsychiatric Interview; MDE, major depressive episode; NS, not significant; STS, Self-transcendence Scale; SUBI, Subjective Well-being Inventory.

illness, or classification of diseases. In this study, 41.4% of the overall model was explainable by the examined variables.

DISCUSSION

To date, the present study is the first investigation that examined the correlation between self-

transcendence and subjective well-being in patients with intractable disease. The intractable disease group had significantly higher STS scores than did the control group. In the intractable disease group, the bone/joint system had significantly lower STS scores than did the neural/muscle system and visual system. In addition, the following had a significant positive correlation with the STS score: age, satisfaction with

Table 4. Multiple regression analyses of the self-transcendence scale score influenced by several factors

Multiple regression analysis (<i>n</i> = 44)			
Factors	B-value	SEB-value	β-values
Age	0.144	0.132	0.156
Satisfaction with free time	-1.398	2.817	-0.066
Duration of illness	0.192	0.150	0.155
Classification of diseases [†]			
Neural/Muscle system	8.227	6.451	0.295
Digestive system	2.372	6.797	0.074
Immunity/Blood system	3.475	7.108	0.116
Visual system	6.097	7.682	0.161
SUBI Positive Affect	0.913	0.259	0.539*
MDE	1.876	2.886	0.089

**P* < 0.001. No interaction between each factor was found.

[†]The reference category is Bone/Joint system.

The data presented are standardized regression coefficients (β-values) for multiple regression analysis.

*R*² = 0.414, *P* < 0.001.

B = unstandardized regression coefficient, *SEB* = standard error of the regression coefficient, β = standardized regression coefficient, *R*² = adjusted *R* square.

MDE, major depressive episode; SUBI, Subjective Well-being Inventory.

free time, duration of illness, non-MDE and positive affect. In multiple regression analysis, however, only positive affect had the significant effect on the STS score in the intractable disease group.

Self-transcendence among patients with intractable disease

Patients with intractable disease had a high level of self-transcendence in comparison to the control group. That is, people with many difficulties and much pain tended to have more transcendental experiences than healthy individuals. Our findings support the Middle Range Theory of Self-Transcendence which stated that self-transcendence is achieved as a result of aging, terminal illness, or other significant life events. For instance, Fassino *et al.* examined 126 HIV patients using the Temperament and Character Inventory. They stated that non-drug-dependent HIV-positive subjects showed a high level of self-transcendence.⁴² Similar to HIV, intractable disease is a chronic disease for which the cause is unknown and standard treatment has not been established. Patients with intractable disease may experi-

ence life-changing pain and suffering from such diseases. While they continue to face difficulties caused by the diseases, they also tend to seek meaning and purpose in their lives on their own terms because of the difficulties and suffering they experience. To support such a claim, it is interesting to note that the result indicated that the bone/joint system had a significantly lower STS score than the neural/muscle system and visual system. Among patients with bone/joint system diseases whose diagnosis was idiopathic osteonecrosis of the femoral head and ossification of the posterior longitudinal ligament, the activities of daily living were independently established to compare to patients with neural/muscle system and visual system diseases. Such a finding suggests that the STS may be influenced by the degree of physical comfort and pain.

Correlation between self-transcendence and subjective well-being

The positive affect that was measured by the WIIO-SUBI was the factor that had the greatest effect on self-transcendence. That is, individuals who experience self-transcendence tend to feel happy and to be psychologically healthy. This result was consistent with findings from previous studies. Many researchers suggest the correlation between self-transcendence and subjective well-being.^{15,25,43} One of the interesting findings from this study was that patients with intractable disease tended to experience self-transcendence, and self-transcendence is significantly associated with one's healthy psychological well-being. Such findings are paradoxical because patients with intractable disease are thought to be unhappy and have poor psychological well-being. Nevertheless, our findings indicate that some individuals, particularly individuals with intractable disease more than healthy individuals, tend to experience self-transcendence. We suggest that because of the suffering and difficulties caused by disease, patients with intractable disease may feel self-transcendence, which consequently leads them to feeling psychologically healthy. When an individual experiences a significant life-changing event, self-transcendence is a process that can help the individual regain psychological well-being.¹⁷ As Reed attests, 'self-transcendence can help the person organize the challenges into some meaningful system to sustain well-being and sense of wholeness across the trajectory of the illness.'¹⁵ Self-transcendence is also a

dynamic process that can be a powerful coping strategy. Once an individual is able to transcend, he/she can effectively face their physical, emotional, or mental suffering.⁴⁴

This study showed that self-transcendence is one of the key factors that influences one's subjective well-being, and a participant's sex, marital and employment status, and living arrangement did not affect self-transcendence. Self-transcendence is a journey, not a final state, and others may be able to facilitate such processes. Therefore, it is crucial for health-care providers to help patients with intractable disease to promote self-transcendence.

Limitations

The data were collected from participants who were patients of centers that support intractable disease and who were followed up by the support centers at their home and institution. Self-transcendence has been reported to be promoted through group therapy sessions and other creative approaches.^{17,18,45,46} In the present study, the participants were patients from organizations for people with intractable disease and patients who were being followed up at an institution or their home. These patients had support from patient organizations and patient groups at an institution. They also had significant personal connections with others. Therefore, we have to note that these conditions may also influence the tendency of increased levels of self-transcendence. Future studies need to be conducted on patients with no such support. Further, it is crucial to investigate the effects of the stage and severity of the disease on self-transcendence. In addition, the sample size was rather small and the types of intractable disease were few in the present investigation. Thus, studies are needed in which analysis is performed with a larger sample size to generalize the findings. Self-transcendence is an inherent quality in every human being. It is predicted to be affected by various factors, such as sex, age, economic status, support system, personal relationship, and other conditions in the patients' environment. Further, the level of self-transcendence constantly fluctuates. Thus, it is necessary to conduct not only cross-sectional studies but also longitudinal studies. Self-transcendence is difficult to adequately evaluate by quantitative study alone. In the future, qualitative studies will be necessary to understand the role of self-transcendence on patients with intractable disease.

Conclusion

The present study was conducted to elucidate the correlation between self-transcendence and subjective well-being in patients with intractable disease. Our results suggest that patients who undergo a life-changing experience through facing intractable disease tended to show a high level of self-transcendence, which may help them to regain their mental well-being even in a situation that causes physical and mental suffering. In addition, a strong correlation was demonstrated between the Self-transcendence Scale and the WHO-SUBI positive affect. Therefore, the Self-transcendence Scale of Nakamura was shown to have high validity. This scale was developed for Japanese individuals. Self-transcendence can change an individual, provide the power to overcome suffering and disease, and is closely associated with one's well-being and happiness. Therefore, investigation of the role of self-transcendence on patients with intractable disease is worthy of study.

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精神科救急への対応

佐賀大学保健管理センター 佐藤 武

要旨

保健管理センターへ、緊急に心理相談のために訪れる学生および教職員は人間関係のトラブルでひどくショックを受けた人々である。予測がつかない事態に陥った相談者を、保健管理センターで治療できるレベルか、精神科専門医療機関へ安全にバトンタッチするか、を適切に判断しなければならない。そのためには、日頃から、精神科救急を行っている医療機関との連携が大切である。ここでは、特に、自傷・自殺企図者への対応、薬剤の過量服薬への対応、攻撃的行動や暴力をふるう人への対応、動きの多い・落ち着きがなく・反応の過剰な人への対応、不合理な言動と行動およびコミュニケーションのとれない人への対応、動きの少ない・反応の乏しい人への対応、パニック発作・不安発作・過呼吸発作の対応、などに分類される。それぞれの状態像にそって、その特徴と対応のポイントについて述べる。

はじめに

1996年から自殺死は大学生の死因の第一位を占め、さらに一人の自殺者から、自殺傾向の強い関係者に自殺が連鎖する群発自殺の発生した大学もある。内田（2010）は1985～2005年の21年間に実施した調査結果を集計して、在籍学生7,350,496人のうち自殺者は987人であったと報告している¹⁾。しかも自殺者の8割は保健管理センターなどの相談機関を利用することなく死

に至っているという現実は、大学生に対する自殺対策の重要性を示唆している。

本稿では、このような自殺および自殺企図などを含めた精神科救急場面において、大学保健管理センターがどのような対応をとればよいのかについて、総論的にまとめた。以下に、状態像に沿って、具体的な「特徴」と「対応のポイント」に関して総括する²⁾。

自殺企図・自傷者への対応

特徴：自殺企図・自傷を繰り返す人の特徴として、統合失調症の場合、病的体験に支配されている場合、死を意図していることは少ないが、往々にして致死性の高い手段をとることが多い。病的体験に支配されていない場合、将来的な不安絶望感から強く死を意図し、致死性の高い手段をとることが多い。うつ病の場合、病的なうつ症状での強い絶望感や苦悩から、致死性の高い手段をとることが多い。うつ病の回復期に自殺企図が多い。神経症性障害では、葛藤状況やストレス反応、危機状況における反応性や衝動的なものが多い。死の意図性はさほど強くない場合が多いか、時に薬物の過量服用など、結果的に身体的ダメージが大きい場合がある。人格障害や環境要因に困難の多い場合は自殺企図・自傷を繰り返すことが多い。

対応のポイント：死の「意図性」はどれくらいか、手段の「致死性」はどのくらいか、背景

に精神障害がありそうか、をまず評価する。実際に自殺企図例に遭遇した場合、手段や身体的状況にかかわらず、身体的評価と対応が優先する。救命処置後、早期に精神科医と連絡をとり、その後の対応を検討する。まず、家族と関係者との連絡をとる。次に、必要な情報を収集する。例えば、手段がわかるような情報（特に、薬物や化学物質の有無）、意図性がわかるような情報（遺書・遺言・家族や友人への連絡）、背景となる精神障害がわかるような情報（自殺企図歴、精神科治療歴、薬物の服用歴）、自殺念慮の強さなどである。さらに、救急現場で求められる精神障害の鑑別として、幻覚妄想症状、行動異常（特に、興奮、不穏、指示に従えないなど）の有無、精神症状の程度により鎮静、拘束、閉鎖空間での管理が必要とされるかどうかを評価する。

重要なことは、その人から離れないこと（コンタクトをやめない）、その人とコミュニケーションを続けること（コンタクトをとる努力を続けること）、自殺企図や自傷の危険性の高いものを遠ざけること、情報を収集すること、協力者を求めること、救急処置ができる準備をすること、などがあげられる。

薬物の過量服薬への対応

特徴：明確に自殺を企図した場合もあれば、不眠や幻聴、不安などの症状を改善するために数日分をまとめて飲むなどの場合がある。しかし後者の場合でも「死んでも仕方ない」と思っていることがあり、身体の救急と並行して精神科の診察も必要になる。

対応のポイント：まず、薬物の特定が先決である。服用した薬物・化学物質の内容を正確に医師に伝える手配をする。家内やごみ箱を見て、薬剤の包みやパックを集め、医療機関に持参する。降圧剤、糖尿病剤、解熱剤など精神科以外の薬剤でも、過量服用すると生死にかかわるので、同様に持参する。医薬品医学の農薬、除草剤、洗剤、漂白剤、有機溶剤なども同様に持参する。

適切な病院に搬送する。意識状態、呼吸、血圧などのバイタルサインに注意を払い、呼吸が停止することもあるので、人工呼吸を開始する準備も必要である。過量服用した理由を本人、家族等から聴取する。自殺なのか、事故なのか、苦痛な症状・状況から逃れるためか、本人、家族の置かれている心理的、社会的状況にも注意を払う。

攻撃的行動や暴力をふるう人への対応

特徴：次のような方に多い傾向がみられる。男性、育った環境に虐待や家庭不和などがある、過去に暴力行為（非行や犯罪歴）を起こしたことがある、薬物やアルコールの常用者などである。攻撃的行動や暴力がみられやすい疾患として、幻覚や妄想や精神運動興奮に基づく統合失調症の急性期、躁うつ病の躁状態、ストレスに対する反応がみられる人格障害、アルコールあるいはそれを中断した離脱症状、家庭内暴力、認知症などである。

対応のポイント：自分と相手がお互いに外傷を負わないことが第一である。閉鎖空間で、1対1で対応することはできるだけ避けること。逃げるルートは確保しておくこと。対応する際は、相手と適当な距離を保ちながら、静かに威圧的にならないように接することが大切である。また、対処する人を集めることが重要で、人の数が大きな力となる。どうしても困難な場合、鎮静剤の注射の力が必要となることもある。ある程度のコンタクトがとれるようであれば、次のようなことを尋ねてみる。

現在、攻撃的な考えがあるかどうか最近、攻撃的な行動があったかどうか暴力、反社会的、破壊的な行動が過去にあったかどうか、その人をサポートする体制があるかどうか。最近、ストレスがあるかどうか、物質乱用があるかどうか、などを確認する。

動きの多い・落ち着きがなく・反応の過剰な人への対応

特徴：動きが多く、落ち着きがなく、過剰な

反応などの状態がどのような原因によって生じているかを区別する必要がある。気分が高揚しているのか、思考が障害されているのか、意識レベルが低下しているのか、薬物などの服用があるのか、などを区別することにより、対応が変わってくる。一般に、躁、焦燥、多弁、多動といった状態でみられる。そのために、病歴を尋ね、会話する態度や声の大きさ、話題の転換の早さなどから、躁状態であるかどうかを判断する。

対応のポイント：対応としては、一貫した誠実かつ毅然とした態度が要求される。暴力行為や社会的逸脱態度が著しい場合や自傷他害の可能性がある場合、警察へ連絡または保護要請が必要とされる。精神科疾患の既往がある場合、精神科医療機関との連携、病院へ同伴することが望ましい。保健管理センターのスタッフは、シンプルで誠実な態度で接し、怒りを表現したり、大声で論争しないように心がける。静かな場所に移すことも大切である。明確かつ正確に話し、できること以上の約束はせず、怒りに対する懲罰をほのめかすようなことは言わない。

不合理な言動と行動およびコミュニケーションのとれない人への対応

特徴：不合理な言動・行動には、精神病状態のこともあれば、重大な身体疾患が原因の場合もある。身体疾患では時として放置すれば早期に死に至ることもあり、また精神病状態でも本人に様々な不利益が起こることが予想される。このような言動に接した場合、その原因を明らかにし、また早期に本人および周囲の安全を確保する手立てをとる必要がある。そのためには、担当者の安全確保のため、複数で対応し、本人に背を向けないようにする。身体拘束されている人では、安全が確認されるまで拘束を解かないようにする。早期に本人の身元を明らかにする。

対応のポイント：意識がはっきりしている場合、家族と連絡がとれる人は家族と協議して対

応を決める。連絡がとれない場合、病院を受診させる。意識がぼんやりしている場合、生命の危険を除外するために、できるだけ早く、場合によっては家族と連絡が取れなくても病院を受診させる。本人に対しては、興奮しそうな人では、人手が揃うまで処置や説得を始めないようにする。本人へは処置の前に、低く落ち着いた声で、理由を簡潔に告げる。特に、最小限の理由は必ず説明するようにする。人手が揃ったら、役割を決め、理由を告げてから行動に移る。取り押さえるには、危険物を持たない場合でも最低5名の手が必要である。この場合、4名で四肢を押さえ、残りの1名が指示を出す（時に、頭を支持する）ようにする。危険物を持っている場合、安全のために経験ある人物の指揮に従う。

本人の意思に反した処置をとる場合、例えば、説得に成功せず、病気を疑う合理的な理由があり、放っておけば、自殺する、他人に危害を加える、行き倒れるなどの切迫した危険がある場合、本人の意思に反しても処置を行う必要がある。本人が処置を待てずに、その場を立ち去ろうとする場合には、安全のために警察に連絡し、保護を求める。

具体的に、自傷他害の恐れがある場合、最寄の保健所へ措置入院の通報を行う。連絡先が不明な場合、警察に連絡する。これは一般人通報といい、理由があれば、誰が行っても差し支えない。他の危険がある場合、例えば、行き倒れなどの切迫した危険がある人は、家族と連絡し、対応を検討する。本人が病院受診を了承すれば、病院を受診させる。本人が病院受診を拒否して立ち去る場合、家族の了承があれば、本人の同意がなくても精神保健指定医の診察により、精神病院への入院が可能な場合がある。精神保健指定医の診察は最寄の精神病院に相談する。

家族と連絡がとれない場合、本人が発見された市町村長が保護者となるので、市町村役場に連絡する（精神保健福祉法第21条）。それ以外に、精神保健指定の診察を経て、応急入院が可