

## Recommendations for revision of the GPSP by the NCNP and related societies

Before the scheduled revision of the GPSP in 2012, the CSP of the NCNP and societies with experience in suicide prevention activities began recommending revisions. They were based on research since the GPSP was established. A working group founded by the CSP requested from 88 societies: (i) policy proposals for the GPSP revision and (ii) details of evidence-based suicide prevention activities to implement then or in the future. The working group prepared its recommendations for revising the GPSP and submitted them in June 2012 to the Minister of State for Suicide Prevention.<sup>23</sup>

Here are a few recommendations in the executive summary: (i) local governments should focus resources on suicide prevention activities specific to local conditions and directly related to suicide; (ii) three types of suicide prevention – universal prevention (efforts that affect everyone in a defined population regardless of the risk of suicide), selective prevention (efforts that target subgroups at elevated suicide risk), and indicated prevention (for individuals with a risk factor or condition that puts them at very high risk)<sup>1</sup> – should be specified to reinforce safe and effective prevention; (iii) require proper use of evidence on suicide and suicide prevention; (iv) emphasize concrete, focused approaches to the social factors, including socioeconomic factors such as bankruptcies, heavy debt, and joblessness, underlying suicide; (v) cultivate better understanding of mental health; and (vi) reinforce monitoring schemes to support suicide survivors and people at high risk for suicide. Cooperation between the mental health and social service sectors is essential for suicide prevention.

The total revision of the GPSP in August 2012<sup>24,25</sup> reflected an immense effort to obtain scientific evidence and opinions. The revised GPSP's was subtitled: "Achieving a society where nobody is driven to suicide", thus underscoring importance of practical approaches at the local level. It emphasized the need to support people who attempt suicide, and for selective and indicated prevention for high-risk groups and individuals. The revised policy noted the importance of cooperation among the central government, local governments, municipalities, and private organizations to expand support of high-risk people, possibly by linking suicide prevention policy with other policies.



## Suicide statistics after 2006

Approximately 30 000 people each year died from suicide between 2006 and 2011 (see Figure 1). After 2009 the suicide rate declined, bringing the annual number of suicides in 2012 to below 30 000, for the first time since 1998.

After 2009, suicide rates among men aged 45–64 dramatically decreased (Figure 2). According to police statistics,<sup>2</sup> the number of suicides attributed to economic and livelihood issues decreased steadily from more than 8000 in 2009 to approximately 5200 in 2012. Of suicides where reasons could be determined, economic and livelihood issues remained the most frequently reported among middle-aged men. The CaO analyses of police statistics<sup>26</sup> suggested that the decreased suicide rate among middle-aged men might be in part the result of the suicide prevention policy initiated by the Basic Act and GPSP, and relevant activities under the Money Lending Business Act. Efforts by local governments and related organizations, including support for middle-aged, jobless men or multiply-indebted men, may also have contributed to the decrease. Moreover, the CaO suggested that the decrease in suicide after 2009 may be due to a decrease in suicide associated with health problems.<sup>26</sup>

Nakanishi *et al* examined progress in community systems for suicide prevention and initiatives for suicide prevention by local governments using the Special Fund.<sup>27</sup> The Special Fund seemed to have successfully promoted creation of community systems for suicide prevention and local government suicide prevention effort. Although, to our knowledge, it was the first empirical study to assess the impact of the Special Fund, future research should evaluate the impact of the suicide prevention policy initiated by the Basic Act and GPSP and by the Special Fund with a focus on national and small area-specific suicide rates.

How can Japan assess the effect of initiatives on suicide rates? The Special Fund, for example, dates from fiscal year 2009, providing only a few years of data. Because of the complexity of risk factors for suicide,<sup>1</sup> it is very difficult to know whether changes in suicide rate are due to national suicide prevention initiatives (that is, the Basic Act and GPSP) and to the Special Fund. Furthermore, due to the low rate of completed suicides, the suicide rate should not be considered as the only primary indicator of measuring the effectiveness of suicide prevention efforts.<sup>1</sup> To evaluate suicide prevention policy effects on suicide in Japan and in other

countries, other outcome measures, such as suicide attempt rate and increase in mental health literacy are relevant. Help-seeking behavior among the public, as well as suicide rate, should be considered.

## Conclusion

Our review suggests that the Basic Act and the GPSP facilitated Japan's suicide prevention activities by establishing a Special Fund for local governments, emphasizing networking among relevant stakeholders. Increased funding and activities led to a comprehensive, multi-sector approach<sup>28</sup> with attention to social factors underlying suicide. The essence of Japan's suicide prevention program can be found in the Basic Act: suicide prevention must be implemented as part of a society-wide effort, because suicide is not just a personal problem. Japan's suicide prevention policy has attended to social factors that contribute to suicide and has tried to increase public awareness to help develop a comprehensive prevention policy, as advocated in the WHO Mental Health Action Plan 2013–2020.<sup>29</sup> Public attention helped the government allocate substantial budgets to local governments and municipalities to promote grass-root activities by non-profit organizations.

In Japan, a serious lack of evaluation of suicide prevention activities persists. One exception is the suicide prevention program led by Oyama *et al*<sup>3</sup> that measured improvement in detection and treatment of depression among the elderly living in a rural area in Japan. A recent study reports on a community-based multimodal intervention for suicide prevention in rural areas with high suicide rates in Japan.<sup>30</sup> As described in the revised GPSP of 2012, Japan's suicide prevention strategy should enhance evaluation and monitoring schemes.

As suicide is a global problem requiring a global dialog, the WHO published the World Suicide Report in September 2014.<sup>16</sup> The report prescribes that (i) suicides are preventable and a comprehensive multi-sectoral suicide prevention strategy is needed; (ii) restricting access to the means for suicide, including pesticides, firearms, and certain medications, is an effective strategy for preventing suicides and suicide attempts; (iii) health-care services need to incorporate suicide prevention efforts as a core component; and (iv) communities play a critical role in suicide prevention, providing social support and follow-up care, fighting stigma, and supporting those bereaved by suicide.

We believe that Japan's experience with a comprehensive suicide prevention strategy, based on a legal foundation, can assist other countries in planning a suicide prevention policy. Japan's experience can be of particular help to countries that have undergone rapid changes in their social structure, such as sudden economic growth or population decline. The development of suicide prevention policy should be closely monitored so that other countries can benefit from the experience.

### Acknowledgements

We extend our gratitude to Dr Shekhar Saxena, Dr Alexandra Fleischmann, and Dr Yutaro Setoya of the World Health Organization, and Dr Wang Xiangdung of the WHO Western Pacific Regional Office. We also would like to thank Japan's Cabinet Office and Ministry of Health, Labour and Welfare of Japan for their support.

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## Prevalence, associated factors and source of support concerning supportive care needs among Japanese cancer survivors

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### Abstract

**Background:** The current study aimed to describe cancer survivors' supportive care needs in Japan, to identify associated factors of unmet needs, and to describe the source of support that are preferred and actually used by cancer survivors.

**Methods:** Using a web-based questionnaire, we examined unmet supportive needs and its associated factors among 628 adult Japanese cancer survivors. The questionnaire comprised 16 items representing five domains (medical-psychological, financial, social-spiritual, sexual, and physical needs).

**Results:** Prevalence of unmet need ranged from 5 to 18%, depending on different domains. The prevalence was high in medical-psychological and financial domains and relatively low in physical and sexual domains. Poor performance status, psychiatric morbidity and low income status were associated with unmet needs of most domains. Most cancer survivors preferred and actually sought support from their family and friends. Financial needs were preferred to be provided by non-medical professionals. Call for peer support was intense, especially for medical-psychological, social-spiritual, and sexual needs; however, peer support was not well-provided.

**Conclusions:** This study illustrated characteristics of Japanese cancer survivors who are likely to have unmet needs. The study demonstrated need for expanded involvement of non-medical professionals and peer support, especially in the domains of medical-psychological, social-spiritual, financial and sexual needs.

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Received: 4 December 2013

Revised: 8 September 2014

Accepted: 11 September 2014

### Background

The number of cancer survivors has been increasing because of rising incidence of cancer and advances in cancer treatment [1]. This emphasizes the importance of recognizing concerns among cancer survivors.

Supportive care need is defined as 'requirement of some action or resource that is necessary, desirable, or useful to attain optimal well-being' [2]. Needs are considered unmet if required actions/resources have not been provided. Up to 30 to 50% of cancer survivors have unmet supportive needs [3–7], leading to poor quality of life and psychological distress [8]. Therefore, knowledge about their supportive needs and possible source of support is critical for better patient care and policy making.

The understudied topics in this area include the following [2–11]: First, past studies mostly addressed only specific populations in terms of time from cancer

diagnosis – either addressing survivors within 1 year from diagnosis [3,4,7] or long-term survivors [6]. Few studies have examined supportive care needs across the 'stages' of cancer survivorship (active treatment, re-entry, and long-term survivorship [12]). Second, findings have been scarce regarding the sources of support that cancer survivors use to meet their needs. Third, while supportive care services must be considered in cultural and health service contexts [13], only a few surveys have been done in Japan, limited to patients with breast and colorectal cancer, or inpatient settings [8,11,14]. In Japan, the National Basic Plan to Promote Cancer Control Programs [15] came to effect in 2007, aiming to establish basic structure of cancer treatment in the country. The plan, revised in 2012, explicitly describes quality of life of cancer survivors as an important agenda.

Therefore, the current study aimed (1) to describe cancer survivors' unmet supportive care needs in

Japan, (2) to identify its associated factors, and (3) to describe the source of support that cancer survivors prefer and actually use.

## Methods

### Participants and procedure

This study was conducted as a part of a larger study [16,17] that aimed to measure quality of life of short-term and long-term cancer survivors in the community. Participants were eligible if they were diagnosed with cancer within 10 years. The participants were recruited through a nationwide commercial-based website-monitoring system (INTAGE research monitor, Inc., <http://intage.co.jp>). This is a registry used for multiple purposes, ranging from scientific research to commercial marketing. The registrants were recruited through social media and self-selectively registered. The registrants are reimbursed if they participate in surveys. Approximately 1,300,000 people were registered, among whom 2059 people were registered as having been diagnosed with cancer within 10 years.

We aimed to recruit 600 cancer survivors using a stratified sampling method by gender (male:female=1:1) and time since cancer diagnosis (200 survivors each from the following three categories: within 2 years from cancer diagnosis, 2 to 5 years, and 5 to 10 years). We used a cutoff of 2 years in the assumption that patients with certain types of cancers can take more than 1 year until they complete treatment. A cutoff of 5 years is a widely used definition of long-term cancer survivors [18]. The sample size was set because majority of past studies enrolled up to 200 participants [5]. We randomly selected and invited 900 potential participants, with estimation of 60% response rate (based on the previous statistics of the database). The survey was conducted over a week in December 2012 after approval by the institutional review board of Tohoku University.

## Measures

### Supportive care need

Prior to this study, we reviewed existing supportive care need questionnaires and identified two well-used questionnaires as candidates – the Supportive Care Needs Survey Questionnaire [19,20] and the Cancer Survivors' Unmet Needs measure [21]. However, the former scale lacks important domains for long-term survivors (e.g. employment issues, financial burden, fertility). The latter scale is highly inclined to psycho-social and existential issues and included domains that are not relevant to most Japanese cancer survivors (e.g. parking issue). Furthermore, it has not been validated in Japan. Therefore, we decided to develop an original scale.

We developed a questionnaire based on the items of the Quality of Life Cancer Survivors Instrument (QOL-CS) [22], which was used as an outcome measure in a part of this survey. The QOL-CS comprises 41 items representing four domains (physical, social, psychological, and spiritual well-being) of cancer-specific quality of life. Because the QOL-CS contains multiple items that cover similar concepts and for the purpose of reducing burden of respondents, the research team elaborately rephrased and merged these 41 items into 16 items. We merged six items of physical symptoms (fatigue, appetite, pain, constipation, nausea and overall physical health) into a single item 'physical problems, such as fatigue, appetite, pain, constipation, nausea'. We replaced ten items on psychological well-being (e.g. coping, quality of life, anxiety and depression) by a single item 'psychological issues provoked by cancer'. We merged three items assessing level of distress during each stage of treatment (initial diagnosis, cancer treatments, and time after treatment completion) into one item 'level of distress through cancer diagnosis and treatments'. We merged four items assessing level of fear toward diagnostic tests, cancer recurrence, metastasis and secondary cancer, into a single item of 'your level of fear on diagnostic tests and cancer progression or recurrence'. We replaced seven items assessing spiritual well-being by two items of 'interpersonal and social issues' and 'religious and spiritual issues'. This item was rephrased as such because concept of spirituality was considered unfamiliar to most Japanese survivors, and meaning of life is generally described in societal and interpersonal perspectives [23]. The rest of the items were left unchanged, which included eight items on social concerns (e.g. personal relationship, sexuality, employment, and financial burden), menstrual changes or fertility, and sleep.

Responses to these questions were adopted from Zebrack's web-based need surveys [24,25]. Respondents were asked to endorse one of the following responses: (a) 'Have not used any service and have not had need in that domain', (b) 'Have already used a service and have no further need', (c) 'Have not used any service so far but would like to use in the future', and (d) 'Have used service(s) and would like to use more'. Participants who answered (a) were categorized as having no need. Participants who answered (b) or (d) were categorized as participants with 'service used'. Participants who answered (c) were categorized as having 'unmet need'.

We conducted an exploratory factor analysis in the current sample to see the structure of the questionnaire using the principal component analysis with promax rotation. Based on the scree plot, we considered five-component structure as appropriate. Those five factors were named medical-psychological needs (four items, Cronbach's alpha coefficient=0.88), financial needs (three items, 0.78), social-spiritual needs (five items, 0.83), sexual needs (two items, 0.80), and physical needs (two items, 0.62). The



## Supportive care needs in Japanese cancer survivors

correlation coefficients between each factor were weak to moderate ( $r=0.40\text{--}0.79$ ). (Supplementary table)

### Source of support – preference and actual use

We asked the participants who had used any service before the survey (i.e. those who answered either (b) or (d)) about the source of support they had used. We asked those who had any needs at the time of survey (i.e. those who answered either (c) or (d)) about the kind of support they would like to use further. The participants were allowed to choose as many answers as they liked from among (1) medical professionals, (2) non-medical professionals, (3) peer support, and (4) family or friends.

### Psychological distress

Psychological distress was measured using the K6 scale [26], a self-rated six-item questionnaire exploring the frequency of psychological distress during the past 30 days. The K6 scores range from 0 to 24. Those who scored 15 or more were classified as having psychiatric morbidity [27].

### Perceived social support

Participants' perceived social support was assessed with the short-version Multidimensional Scale of Perceived Social Support [28]; a well-validated seven-item questionnaire with seven-point scales. The participants were divided into two groups according to the median score.

### Demographic and medical characteristics

We asked the participants of their demographic and clinical information, as listed in Table 1.

### Statistical analysis

First, we conducted descriptive analyses to characterize the overall study sample, summarizing the proportions of patients indicating no need, service used and unmet need in each of the 16 need areas. Ratios of service used:unmet need were calculated for each need to describe proportion of participants who received appropriate services. Also, we compared prevalence of unmet needs according to time since last treatment, using chi-squared test and Fisher's exact test where appropriate. Second, we conducted binary logistic regression analyses to explore associated factors of unmet needs. Demographic and clinical variables, psychiatric morbidity and social support, were entered as independent variables. A backward stepwise selection method was used to reduce non-significant variables from the models, with a  $p$ -value of  $<0.1$  on the Wald statistics. Participants with missing values were excluded from this analysis. Further, we conducted descriptive analyses on source of support which the participants (1) preferred

**Table 1.** Demographic background ( $n = 628$ )

Characteristics		n	%
Age	< 50	190	30.3
	50–64	267	42.5
	≥65	171	27.2
Gender	Male	314	50
	Female	314	50
Marital status	Married	502	79.9
	Single or divorced/ widowed	126	20.1
Having child(ren)	Yes	464	73.9
	No	164	26.1
Age of youngest child ( $n = 464$ )	<College graduation	164	35.3
	≥College graduation	300	64.7
Household size	Living alone	70	11.1
	Two or more	558	88.9
Occupational status	Employed	277	44.1
	Unemployed	351	55.9
Annual income	<4m yen	214	34.1
	≥4m yen	368	58.6
Change in income status	Unknown	46	7.3
	No change	397	63.2
	Decreased	216	34.4
Cancer site	Increased	15	2.4
	Lung	23	3.7
	Gastrointestinal	163	26.0
Years since diagnosis	Breast	165	26.3
	Urological	126	20.0
	Gynecological	44	7.0
	Other	107	17.0
	<2 years	211	33.6
Performance status	2–5 years	208	33.1
	5–9 years	209	33.3
Received treatment (absolute number)	0	413	65.8
	1	200	31.8
	2	13	2.1
	3	2	0.3
Treatment combination	Surgery	530	84.4
	Radiation therapy	194	30.9
	Chemotherapy	248	39.5
	Hormonal therapy	201	32
	Surgery (=Sur) only	187	30
	Radiation therapy (=Rt) only	8	1
	Chemotherapy (=Cx) only	12	2
	Hormonal therapy (=Hor) only	11	2
	Sur + Rt + Cx + Hor	52	8
	Sur + Rt + Cx	39	6
	Sur + Rt + Hor	49	8
	Sur + Rt	26	4
	Sur + Cx + Hor	28	4
Sur + Cx	104	17	
Sur + Hor	45	7	
Rt + Cx + Hor	1	0	
Rt + Cx	8	1	
Rt + Hor	11	2	
Cx + Hor	4	1	
No treatment	43	7	

and (2) actually used. Data were analyzed with the SPSS version 21.0 (IBM). All the tests were two-tailed, with  $p$ -value of  $<0.05$ .

## Results

### Participants' characteristics

Of 900 candidate participants, 628 responded and completed the questionnaire (response rate: 69.7%). Data of 46 survivors with missing values were excluded from the logistic analysis. The participants' mean age was 56 years. Most participants were in good performance status. Type of cancer was skewed toward breast and prostate cancers, and proportion of lung and gastric cancers were smaller than Japanese general population sample [29] (Table 1).

### Prevalence of no need, service used, and unmet need

Approximately 5 to 18% of the participants had unmet need in any of the 16 areas of needs (Table 2). The prevalence was generally high in medical-psychological and financial domains and low in physical and sexual domains. Ninety-five participants (15.1%) endorsed one domain of unmet needs, and 162 participants (25.7%) endorsed two or more domains (data not shown). The ratio of service used : unmet need shows that services were relatively well used for medical-psychological needs, social-spiritual needs, and physical needs and relatively less for sexual needs (Table 2). The prevalence of unmet needs was constant after treatments (Table 3).

### Associated factors of unmet needs

Table 4 shows the associated factors of unmet needs of each domain. Poor performance status and psychiatric morbidity were associated with unmet needs of most domains. Gender, marital status, cohabitants, change in income, and social support were not associated with unmet needs. Employed survivors were more likely to have unmet medical-psychological needs. Unmet sexual needs are remarkable among younger survivors, survivors of urological cancer, and survivors who passed long after surgery. Presence of young children was associated with unmet social-spiritual needs. Lower income was associated with unmet medical-psychological, financial, and social-spiritual needs. Prevalence of unmet needs did not differ among groups in terms of time since cancer diagnosis for any domain of needs.

### Preference and actual use of support

In Figure 1, we illustrated both actual and preferred source of support. Most cancer survivors preferred and actually sought support from their family and friends, except for physical problems. Support from medical professionals was preferred for most of the needs except for financial needs. Non-medical professionals (e.g. social welfare, labor union, job-coordination center, professional helpers, and insurance company) were the preferred source of support for financial needs. Call for peer support was intense,

**Table 2.** Prevalence of no need, service used and unmet need

	No need		Service used		Unmet need		Service used : Unmet need
	n	%	n	%	n	%	
Factor 1: medical-psychological needs							
Concerns about illness or treatment	373	59.4	174	27.7	81	12.9	2.1:1
Psychological problems	386	61.5	166	26.4	76	12.1	2.2:1
Fear of recurrence	306	48.7	213	33.9	109	17.4	2:1
Concerns about family	344	54.8	209	33.3	75	11.9	2.8:1
Factor 2: financial needs							
Financial burden	338	53.8	178	28.3	112	17.8	1.6:1
Interference in employment	401	63.9	136	21.7	91	14.5	1.5:1
Interference in home activities	388	61.8	185	29.5	55	8.8	3.4:1
Factor 3: social-spiritual needs							
Personal relationship problems	408	65.0	178	28.3	42	6.7	4.2:1
Religious and spiritual problems	530	84.4	69	11.0	29	4.6	2.4:1
Support from other people	268	42.7	318	50.6	42	6.7	7.6:1
Social problems	420	66.9	123	19.6	85	13.5	1.4:1
Isolated feeling	411	65.4	154	24.5	63	10.0	2.4:1
Factor 4: sexual needs							
Menstrual changes and fertility	508	80.9	64	10.2	56	8.9	1.1:1
Sexuality	481	76.6	84	13.4	63	10.0	1.3:1
Factor 5: physical needs							
Sleep problems	460	73.2	117	18.6	51	8.1	2.3:1
Physical problems	440	70.1	144	22.9	44	7.0	3.3:1

## Supportive care needs in Japanese cancer survivors

**Table 3.** Prevalence of unmet needs according to time since latest treatments

Time since last administration of each type of treatment	None	<3 months	3 months–1 year	1–5 years	5–10 years
	n (%)	n (%)	n (%)	n (%)	n (%)
Factor 1: medical-psychological needs					
Surgery	22 (22.4)	9 (16.4)	27 (28.7)	58 (22.8)	26 (20.5)
Chemotherapy	88 (23.2)	17 (28.3)	8 (21.1)	22 (21.8)	7 (14.3)
Hormonal therapy	91 (21.3)	25 (24.5)	5 (26.3)	14 (26.4)	7 (25.9)
Radiation therapy	98 (22.6)	9 (33.3)	6 (24)	21 (21)	8 (19)
Factor 2: financial needs					
Surgery	20 (20.4)	16 (29.1)	24 (25.5)	71 (28)	27 (21.3)
Chemotherapy*	85 (22.4)	21 (35)	15 (39.5)	29 (28.7)	8 (16.3)
Hormonal therapy	101 (23.7)	30 (29.4)	4 (21.1)	18 (34)	5 (18.5)
Radiation therapy	102 (23.5)	11 (40.7)	7 (28)	30 (30)	8 (19)
Factor 3: social-spiritual needs					
Surgery	19 (19.4)	10 (18.2)	17 (18.1)	59 (23.2)	25 (19.7)
Chemotherapy	74 (19.5)	15 (25)	9 (23.7)	21 (20.8)	11 (22.4)
Hormonal therapy	88 (20.6)	22 (21.6)	4 (21.1)	13 (24.5)	3 (11.1)
Radiation therapy	85 (19.6)	8 (29.6)	7 (28)	21 (21)	9 (21.4)
Factor 4: sexual needs					
Surgery	7 (7.1)	5 (9.1)	11 (11.7)	35 (13.8)	20 (15.7)
Chemotherapy	42 (11.1)	7 (11.7)	6 (15.8)	15 (14.9)	8 (16.3)
Hormonal therapy	46 (10.8)	12 (11.8)	4 (21.1)	11 (20.8)	5 (18.5)
Radiation therapy	51 (11.8)	5 (18.5)	3 (12)	11 (11)	8 (19)
Factor 5: physical needs					
Surgery	9 (9.2)	6 (10.9)	9 (9.6)	38 (15)	16 (12.6)
Chemotherapy	44 (11.6)	10 (16.7)	1 (2.6)	17 (16.8)	6 (12.2)
Hormonal therapy	53 (12.4)	15 (14.7)	1 (5.3)	7 (13.2)	2 (7.4)
Radiation therapy	52 (12)	5 (18.5)	4 (16)	12 (12)	5 (11.9)

\*p < .05; chi-squared test and Fisher's exact test.

especially for medical-psychological, social-spiritual, and sexual needs; however, peer support was generally not well-provided.

### Discussion

This survey demonstrated prevalence of unmet supportive care needs among Japanese cancer survivors as 4.6 to 17.8%, depending on different domains. These figures are lower than those of survivors who are under treatment [3–5,7] and are comparable with those of long-term cancer survivors [6]. The prevalence was high in psychological domain and low in sexual domain. Prevalence of unmet needs was generally not different either according to time since cancer diagnosis or since last administration of treatments. Cancer survivors should be examined for their unmet needs long after cancer diagnosis and completion of treatment.

Medical professionals and family/friends are the two major sources of support. In contrast, gaps between preference and actual use of peer support and support by non-medical professionals were remarkable. Call for support by non-medical professionals is remarkable for financial needs. In Japan, approximately 30% of patients with

cancer quit their job after cancer diagnosis, and the large proportion of the rest was obliged to change their work status from full-time to part-time employment [30,31]. As conceptualized in the reviews by Feuerstein *et al.* [32] and Mehnert [33], cancer survivors need multifactorial support for employment by multiple disciplines [30,31,34].

Need for peer support has long been questioned in Japan because Japanese people have been considered as less likely to share their illness experience with others [35]. Only 20% of all designated cancer centers in Japan are equipped with peer support programs as of 2013, despite the recommendation in Japanese Basic Plan to Promote Cancer Control Programs [15,36,37]. Our results argue for further promotion of peer support programs. Peer support is expected to supplement professional psychological services, where patients with cancer are often reluctant to consult [38].

Cancer survivors with unmet sexual needs are frequently not provided with any service. Sex-related issues are infrequently discussed in clinical practice in Japan [39], and increasing clinicians' awareness and clinical skills are imperative. Considering that cancer survivors perceive family and friends as an important source of

**Table 4.** Associated factors of unmet needs (n = 582)

	Factor 1: medical-psychological needs		Factor 2: financial needs		Factor 3: social-spiritual needs		Factor 4: sexual needs		Factor 5: physical needs	
	OR	95%CI	OR	95%CI	OR	95%CI	OR	95%CI	OR	95%CI
Age (reference: ≥65) <50	—	—	—	—	—	—	2.49*	1.03–6.00	—	—
Age of youngest child (reference: ≥college graduation) <College	—	—	—	—	2.12**	1.22–3.70	—	—	—	—
Employment status: employed (reference: unemployed)	1.90**	1.23–2.94	—	—	—	—	—	—	—	—
Annual income: <4m yen (reference: ≥4m yen)	1.99**	1.27–3.13	2.26***	1.51–3.38	1.93**	1.20–3.12	—	—	—	—
Cancer site (reference: others)	—	—	—	—	—	—	—	—	—	—
Urological	—	—	—	—	—	—	4.67**	1.71–12.79	—	—
Time since latest surgery (reference: no surgery)	—	—	—	—	—	—	—	—	—	—
5–10 years	—	—	—	—	—	—	3.46*	1.30–9.25	—	—
Performance status (PS): ≥1 (reference: PS = 0)	2.02**	1.31–3.13	2.25***	1.48–3.42	2.85***	1.80–4.50	—	—	4.24***	2.43–7.35
Psychiatric morbidity (K6 ≥ 15)	3.55***	2.29–5.46	1.72*	1.12–2.64	4.65***	2.95–7.35	2.59**	1.49–4.52	2.72***	1.59–4.65
Cox-Snell R2	0.114		0.108		0.160		0.068		0.087	
Nagelkerke R2	0.176		0.160		0.254		0.130		0.166	

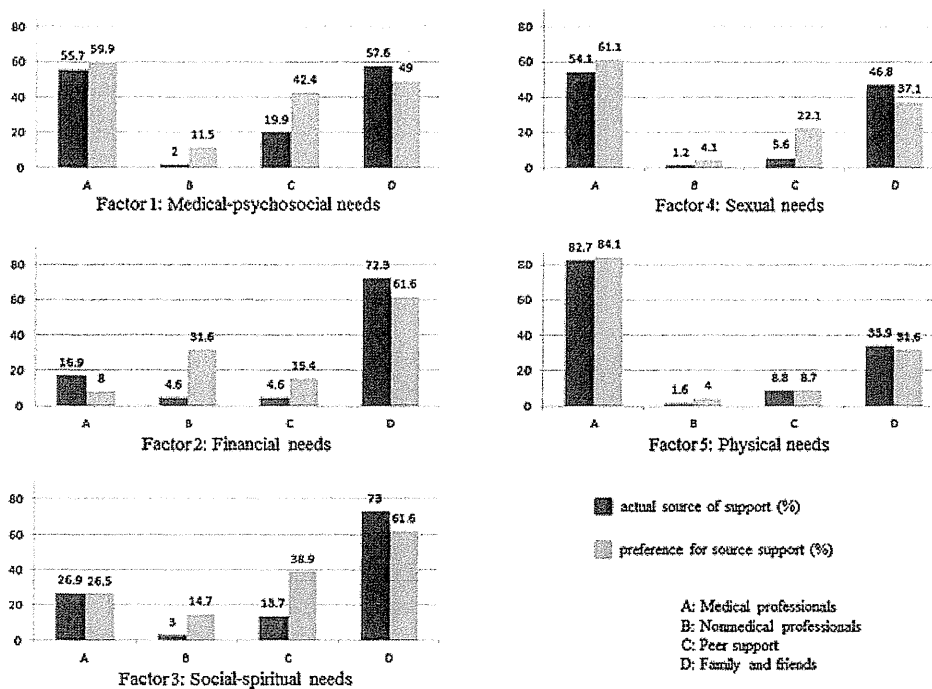
Only significant variables were demonstrated.

OR, odds ratio.

\*p < .05

\*\*p < .01

\*\*\*p < .001



**Figure 1.** Preference and actual use of support

support, proactive education to family can be helpful. Topics including treatment-induced sexual challenges and intercouple communication should be covered in family education [40] and probably in peer support as well.

The strength of our study is relatively large sample size with well-balanced distribution of participants in regards to time since their cancer diagnoses. Use of web-based survey is also advantageous because this

## Supportive care needs in Japanese cancer survivors

enabled to access cancer survivors who do not come to clinics on regular basis.

The most important study limitation is representativeness of the sample. The participants were limited to those who have internet literacy and those who were self-selectively registered to a database. Distribution in age and type of cancers is slightly different from that of general cancer population in Japan. The participants were limited to those in good performance status; therefore, we may have underestimated unmet needs. No difference was made between survivors during and past primary treatment. The second limitation is that our need assessment instrument has not been validated. The items of interest were selected somewhat arbitrarily, although they were derived from a validated quality-of-life instrument and have been selected on agreement of multidisciplinary study team. The questionnaire lacked items on information needs, which have been listed as an important domain of needs in other need instruments. Majority of participants endorsed multiple domains of unmet needs, suggesting need for investigating the impact of different need combinations. Finally, the cross-sectional design provides no information on causal relationship. In particular, variables of time since cancer diagnosis/last treatment should be examined further in longitudinal studies.

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## Conclusions

Despite its limitations, our study is noteworthy because this is the first study in Japan that assessed unmet needs of cancer survivors along with preference and usage of service. The study depicted survivors at risk for unmet needs in different domains. The study also highlighted need for continued and expanded involvement of non-medical professionals and peer support in the care of cancer survivors, especially in the domains of medical-psychological, social-spiritual, financial and sexual needs.

## Acknowledgements

The authors thank Professor Yosuke Uchitomi (Okayama University) and Justin Eusebio (Massachusetts General Hospital) for their helpful comments. This work was supported by the Grant-in-Aid from Japanese Ministry of Health Labor and Welfare [grant number H22-005].

## Conflict of interest

The authors have declared no conflicts of interest.

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## Supporting information

Additional supporting information may be found in the online version of this article at the publisher's web site.

## ■原著論文

## 若年者の自傷行為に対する援助行動と感情体験との関連

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## 抄録:

【目的】若年者の自傷行為に対する援助行動の生起に関連する要因について、援助する者の感情体験との関連性を中心に検討し、わが国に適した自傷予防教育プログラムのあり方について考察を行う。

【調査協力者と研究方法】公立高校の生徒280名に対して、独自に開発した無記名の自記式質問紙を用いて調査を実施し、過去に親しい知人の自傷行為に遭遇した経験があったと回答した60名のデータを用いて分析を行った。

【結果】多重対応分析の結果、「大人への相談を勧める」といった自傷行為に対する援助行動は男性との結びつきが強く、「不安」や「困惑」といった感情と関連していることが示唆された。一方、「話をじっくり聞く」や「心配していることを伝える」といった援助行動は女性との結びつきが強く、「悲しみ」や「怒り」、「心配」といった感情と関連していることが示唆された。また、自傷者に対する援助行動が生起しない背景には、嫌悪・回避的感情が関連しているパターンがある一方で、自らも自傷経験があるために自傷を特別な行為として感じておらず援助の必要性を感じていない、あるいは同じ経験のある者として同情心は湧くものの他者の自傷に関わることで自分が不安定になるのを避けるために援助を行わない、といった場合があることが推察された。

【結論】本研究の結果、わが国の若年者の特徴に応じた効果的な自傷予防教育プログラムを開発する上での重要な情報を得ることができた。

日社精医誌 24 : 9-18, 2015

索引用語：自傷行為, 学校, 感情体験, 援助行動, 自傷予防教育プログラム

## I. 研究背景と目的

本邦で実施された調査の結果、中高生の約1割が過去にリストカットなどの非致命的な手段を用

いた自傷行為を経験していることが明らかにされている<sup>16)</sup>。2013年に改定されたDSM-5<sup>2)</sup>においても、非自殺性自傷行為(Nonsuicidal Self-Injury: NSSI)が新たな診断名として提案されるな

英文タイトル: Association Between Helping Behaviors Toward Self-Injury and Emotional Experiences Among Young Japanese People

受付日: 2014年4月14日 受理日: 2014年10月15日  
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ど、今や自傷行為は思春期・青年期の重要な精神保健的課題の一つとなっている<sup>11)</sup>。また、こうした非致命的な自傷行為は、横断的には自殺企図と異なる行動ではあるものの、将来の自殺企図を予測する重要な危険因子でもある<sup>25)</sup>。

わが国では、近年、若年層の自殺死亡率が上昇傾向にあり、平成24年8月に見直された自殺総合対策大綱において若年者への対策強化の必要性が明記されることとなった<sup>21)</sup>。しかし、残念ながら、これまで海外で実施されてきた若年者を対象とする自殺予防対策に関しては、「地域レベル」での自殺死亡率の低下を示す科学的根拠は乏しい状況にある<sup>24, 26)</sup>。その一方で、自傷行為を繰り返す若年者やパーソナリティ障害を抱えた患者を対象とした心理療法や個別援助の領域では、将来の自殺企図を減少させるというエビデンスが蓄積されつつある方法論もいくつか報告されてきており<sup>7, 18)</sup>、今後の若年層に対する自殺予防対策においては、自傷行為への適切な援助・介入体制の整備を柱とする「選択的・個別的介入」の重要性が増してくるものと思われる。

もっとも、このような若年者の自傷行為に対する援助・介入体制を構築していく上では、さまざまな困難が生じることも予想される。中でも考慮すべき阻害要因として挙げられているのが、自傷経験者に見られる特徴的な援助希求行動である。たとえば、Hawtonらが英国で行った大規模な学校調査からは、自傷後に医療機関を受診した若年自傷者は1割程度にすぎないという結果が得られており<sup>10)</sup>、仮にすでに述べたような専門的治療が提供可能になったとしても、精神保健の専門家との援助関係が成立するに至るまでの道のりが険しいものであることが示唆されている。しかし一方で、この英国の調査では、若年自傷行為経験者の多くが大人には相談しないものの、約4割の者が友人に相談したことがあるという事実も同時に明らかにされている<sup>8)</sup>。もちろん、若年者では自殺関連行動の伝染(contagion)が生じやすいことも数多くの先行研究によって報告されていることから<sup>12)</sup>、自傷経験者が友人に相談しているという事実には注意を払うべき点もあるが、欧米では

むしろこの友人同士のピアサポートを援助の入口として利用しようとする動きが見られている。事実、若年者同士で友人の自傷行為に気づき、それを若年者だけで抱えず大人や専門家への相談につなげるといった一連のスキルを、モデリングなどの手法を用いて教育する自傷・自殺予防プログラムが積極的に開発され<sup>14)</sup>、生徒の自殺の再企図の減少や援助希求行動の増加といった介入効果が実証されつつある<sup>3, 4, 6, 7)</sup>。

わが国においてはこうした友人同士のピアサポートを導入した若年者の自傷行為の予防プログラムはいまだ開発途上にあり、わが国に適した同様のプログラムの開発と介入効果の検証は喫緊の課題である。ただし、援助関係とは、援助を求める側と援助を提供する側の相互作用行為であるため、わが国と海外とでは若年者同士の関係性や友人同士でのピアサポートの方法論が異なることも想定され、海外で開発されたプログラムをそのままわが国に導入したとしても同様の効果を得られない可能性がある。したがって、わが国における自傷予防プログラムの開発や実施可能性、あるいは海外のプログラムの適用可能性や修正のあり方を検討するためにも、まずはわが国の若年者が自傷行為をめぐって友人間でどのような援助関係を構築しうるのかを明らかにしておく必要がある。

先行研究では、自傷行為を行っている者、すなわち「援助を求める側」が、どのような援助要請(help-seeking)の特徴を持っているのか、あるいは彼らの援助要請の生起に影響を与える要因などに関しては検討されてはいるものの<sup>17)</sup>、自傷行為に関連した「援助を提供する側」についての研究はほとんど行われていない<sup>5)</sup>。また、一般的に「援助を提供する側」の研究は、主として社会心理学の領域で向社会的行動(prosocial behavior)や援助行動(helping behavior)の研究として進められているが、従来の援助行動研究では一回限りの援助が研究対象となることが多く、学校の友人関係のように親密かつ継続的人間関係を結ぶ人々の間で日常的にやり取りされる援助行動についてはほとんど検討されていないといった問題点も指摘されている<sup>1, 19, 22)</sup>。さらに、援助行動の理論モ



デルは、奉仕活動や緊急時の援助行動などを含めた多様な援助行為全般をまとめて理論化されているが、それをそのまま「自傷行為に対する援助」の説明に適用可能なのかも確認されていない。もちろん、「自傷行為に対する援助」自体もいくつかの援助行動の組み合わせで構成されるものであり、それぞれの援助行動がどのように生起するのかについても詳しく検討する必要がある。

上記の議論を踏まえ、本研究では、若年者の自傷行為に対する援助行動の生起にどのような要因が関連しているのかを探索的に明らかにし、わが国に適した自傷予防教育プログラムのあり方について検討を行う。ただし、援助行動の生起プロセスに影響を与える要因についてはすでに数多くの研究が報告されており、高木によれば、こうした援助行動に影響を与える要因は多岐にわたることが明らかにされている<sup>28)</sup>。そこで、本研究では先行研究において明らかにされている関連要因の中でも、援助者の援助行動意図に影響を与える程度が相対的に大きいとされている<sup>29)</sup>「対人感情」に焦点を当て、若年者が身近な人の自傷行為に遭遇した際、どのような感情体験を抱き、そしてその感情体験がどのような援助行動に結びつきやすいのかといった点を中心に検討を行うこととした。

## II. 方法

### 1. 調査協力者

A県内の一つの公立高等学校に在籍する2学年生徒280名全員に調査協力依頼を行い、251名(男子100名、女子151名)の生徒から回答を得た(回収率:89.6%)。調査協力者の平均年齢は16.9歳(標準偏差0.3)であった。

調査協力が得られた高等学校は人口20万人以上の市内に設置された全日制普通科高等学校であり、調査実施当時はA県内における偏差値中堅校であった。なお、A県内のほぼすべての公立高等学校において1学年の定員は200~350名の範囲にあった。

### 2. 調査手続き

調査は2012年2月に松本俊彦(第二著者)が生徒向けに行った薬物乱用防止講演会の終了後に、独自に開発した無記名の自記式質問紙を用いて実施された。協力者に対しては口頭および書面で調査の目的、方法、重要性、結果の公表方法に関する説明を行った上で、調査協力の任意性を伝え、協力を拒否しても個人への不利益が生じないことやプライバシー保護について説明を行った。また、調査質問項目に自傷行為に関する内容が含まれることを事前に伝え、調査中にその言葉を見ることによって精神的に不安定になる可能性のある者は、事前に調査を辞退してもらったり、答えたくない質問に対しては回答しなくてもよいことも説明した。さらに、調査実施後に、精神的に不安定になった場合には、担任か養護教諭に相談してもらうよう事前に伝えるとともに、著者のメールアドレスを生徒に公開し、調査後の相談体制を確保した。記入済み質問紙は各自個別に封筒に入れて封をした上で、教員によって回収され、開封されないままの状態の研究者的もとへと郵送してもらった。

本調査は養護教諭との連携体制のもと、学校およびPTAから質問紙の確認ならびに調査実施に関する承認を得て実施された。なお、調査に先立ち調査実施校の校長と自殺予防総合対策センター長の間で調査実施およびデータ取扱についての覚書を締結するとともに、国立精神・神経医療研究センター倫理委員会の承認を得た。

### 3. 調査項目

本研究では、詳しくは後述する、「調査協力者の性別」、「過去の自傷行為経験の有無」、「親しい知人の自傷行為に遭遇した経験の有無」、「親しい知人の自傷行為を知った時の感情体験」および「親しい知人の自傷行為を知った時の援助行動」の総計5つの設問を用いてデータを収集した。

#### 1) 調査協力者の性別

性差の影響はこれまで数多くの援助行動研究において検討されてきたが、研究対象とする援助行

動によって結果が異なることが指摘されているため<sup>28)</sup>、本研究においても援助行動との関連性を検討することとした。質問紙では、「あなたの性別を教えてください」という教示文に対して、「男」・「女」のいずれかを選択してもらった。

## 2) 過去の自傷行為経験の有無

調査協力者における過去の自傷行為経験の有無については、先行研究において援助要請者との類似性が援助行動の生起に影響を与えることが指摘されていることから<sup>28)</sup>、本研究でも援助行動との関連性を検討する変数に含めた。質問紙では、わが国で実施された先行研究と同様、以下の質問項目を使用し、「はい」・「いいえ」のいずれかを選択してもらった。

なお、本研究では、すべての質問項目において自己切傷 (self-cutting) の経験を自傷行為の経験として扱うこととした。自傷行為の手段は多様であるが、複数の専門家が指摘しているように<sup>9, 31, 32)</sup>、自己切傷は非自殺性の自傷行為の中でも最も高い頻度で観察される手段であり、日本の中高生においても一般的な手段であるため<sup>16)</sup>、本研究でもこの手段を採用することとした。「あなたはこれまでに、刃物や鋭利なものでわざと自分の身体を傷つけたことがありますか？」

## 3) 親しい知人の自傷行為に遭遇した経験の有無

本研究は、友人の自傷行為に対する若年者の援助行動について検討することを目的としているが、近年の中高生における「友だち」や「友人」

といった言葉の持つ意味は複雑であるとされ<sup>15)</sup>、これらが必ずしも一定の親密性を表す言葉であるとは限らない。したがって、本研究ではあえて「親しい知人」という言葉を使用し、広義の友人関係における自傷行為への遭遇経験を尋ねることとした。質問項目には以下の文章を使用し、「はい」・「いいえ」のいずれかを選択してもらった。「あなたの親しい知人で、刃物や鋭利なものでわざと自分の身体を傷つけたことがある人はいますか？」

## 4) 親しい知人の自傷行為を知った時の感情体験と援助行動

上記3)の質問項目(親しい知人の自傷行為に遭遇した経験の有無)で「はい」と回答した協力者に対して以下の2つの質問を行い、それぞれ表1に示した選択肢の中から複数回答で感情体験と援助行動の種類について答えてもらった。

感情体験の選択肢は、一般向けの認知行動療法のテキスト<sup>13, 23)</sup>に記載されている気分・感情語リストから自傷行為の発見時の感情語として適していると思われるものを抽出した。また、援助行動の選択肢は、米国で開発された自傷予防教育プログラム<sup>14)</sup>の中で取り上げられている行動を用いた。

「あなたは、その親しい知人が刃物や鋭利なものでわざと自分の身体を傷つけていることを知った時、どのような感情を抱きましたか？ あてはまるすべての選択肢を○でかこんでください。」

表1 親しい知人の自傷行為を知った時の感情体験と援助行動の選択肢一覧

感情体験の選択肢		援助行動の選択肢
①何も感じなかった	⑨怖い	①特に何もしなかった
②不安	⑩困惑	②話をじっくり聞いた
③怒り	⑪愛情	③心配していることを伝えた
④悲しみ	⑫爽快感	④止めた方がいいと伝えた
⑤喜び	⑬気持ち悪さ	⑤大人への相談を勧めた
⑥おびえ	⑭同情	⑥その他
⑦心配	⑮その他	
⑧失望		

「あなたは、その親しい知人が刃物や鋭利なものでわざと自分の身体を傷つけていることを知った時、その人に対してどのような行動をとりましたか？ あてはまるすべての選択肢を○でかこんでください。」

4. 本研究における統計的分析

同意が得られた251名の調査協力者のうち、過去に親しい知人の自傷行為に遭遇した経験があったと回答したのは63名(25.1%)であった。このうちデータ欠損が認められた3名を除外した60名(男子10名、女子50名)のデータを、本研究における最終的な分析対象とした。

分析では、まず、「調査協力者の性別」、「過去の自傷行為経験の有無」、「親しい知人の自傷行為を知った時の感情体験」および「親しい知人の自傷行為を知った時の援助行動」の4つの設問で得られた回答結果をすべて2値変数に変換し、過去に親しい知人の自傷行為に遭遇した経験のある60名の回答からクロス表を作成した。その際、

親しい知人の自傷行為を知った時の感情体験およびその時の援助行動については、各選択肢を選んだかどうかを2値変数にして利用した。

次に、親しい知人の自傷行為を知った時の感情体験の選択肢のうち、「喜び」と「愛情」の選択肢については1人も選択した者がいなかったため、この2つの項目を分析から除外し、改めてクロス表を作成し直した上で、多重対応分析を用いて変数間の関係性について解釈を行った。これらの統計解析にはすべてPASW Statistics 17を使用した。

Ⅲ. 結果

多重対応分析の結果をもとに固有値の累積寄与率と解釈可能性を判断基準としてII軸まで検討を行った。各項目のカテゴリスコアを散布図上に布置した結果(図1)、布置された項目の特徴から、I軸は「支援的関与度の低さ」を、II軸は「自傷行為の非受容的理解」をそれぞれ意味する

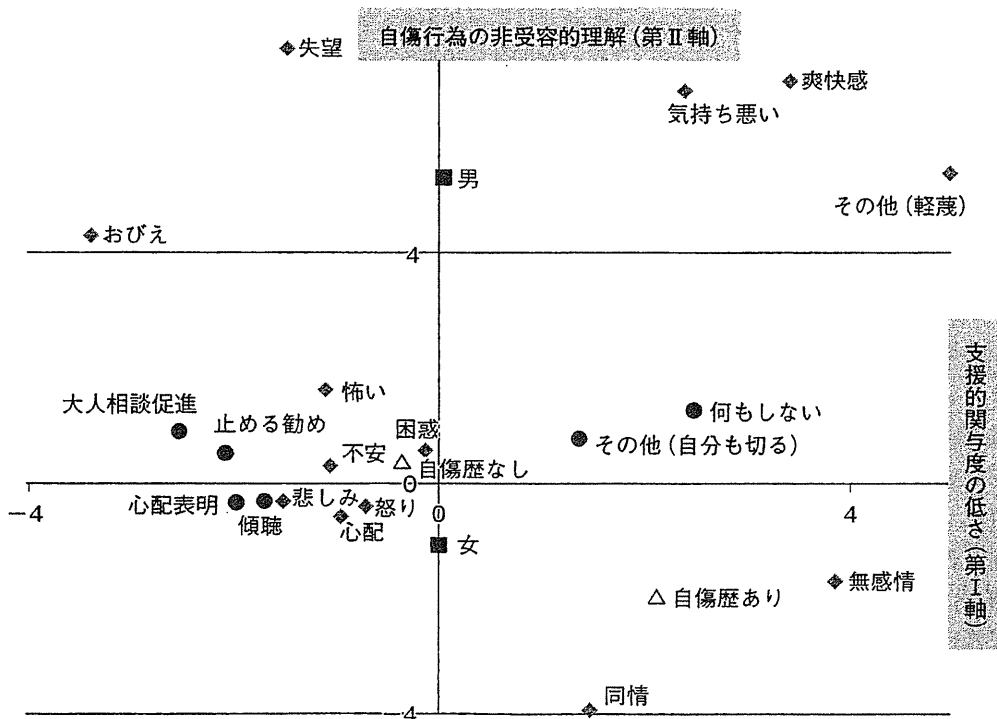


図1 カテゴリースコアのプロット結果

軸であると解釈された。なお、固有値は、I軸が0.199, II軸が0.090で、II軸までの累積寄与率は28.9%であった。

I軸の負の値の方向においては、「止めた方がいいと伝えた(止める勧め)」と「大人への相談を勧めた(大人相談促進)」の2つの援助行動に関する項目が、「怖い」、「困惑」、「不安」といった感情の項目と近い位置に布置されていた。また、「話をじっくり聞いた(傾聴)」と「心配していることを伝えた(心配表明)」の2つの援助行動の項目は「悲しみ」、「怒り」、「心配」という3つの感情の項目と近い位置関係に布置された。一方、I軸の正の値の方向においては、II軸の正の値の方向に布置された「爽快感」や「気持ち悪い」といった感情の項目とII軸の負の値の方向に布置された「無感情」や「同情」といった感情の項目が、ともに「特に何もしなかった(何もしない)」と「その他(自分も切る)」という2つの援助行動の項目と視覚的に同程度の距離に位置していた。

なお、性別の項目はII軸上に布置され、男性が正の値を、女性が負の値を示した。また、「過去の自傷経験あり」は、I軸の正の値の方向で、かつII軸の負の値の方向に布置された。

#### IV. 考察

本研究の結果、若年者が身近な人の自傷行為に遭遇した場合にとる援助行動とその際に体験する感情との間に、いくつかの特徴的な関連性が認められた。以下では、本研究結果の考察と、それを踏まえた今後のわが国における若年者の自傷予防教育のあり方について検討を行う。

分析の結果、まず、「大人への相談を勧める」と「自傷を止めた方がいいと伝える」という2つの援助行動の項目と、「不安」、「困惑」、「怖い」といった3つの感情体験の項目が図1において近接して布置された。この結果から、「大人への相談を勧める」と「自傷を止めた方がいいと伝える」という2つの援助行動には、不安や困惑といった感情が密接に関連しているものと考えられた。すなわち、若年者にとっての「大人への相談

を勧める」行動や、「自傷をやめた方がいいと伝える」行動は、自身の不安や困惑を背景とした「腰の引けた援助行動」となってしまっている可能性が高く、その意味では実際の友人同士でのピアサポート場面において援助行動として機能しないばかりか、場合によっては自傷者との関係悪化を招くことにもなりかねない行動であると推察された。特に前者の「大人への相談を勧める」という行動は、先に示した米国のプログラム<sup>14)</sup>においても重要視されている援助行動であり、視覚教材を用いて自傷行為に関する適切な知識の提供と大人へのつなぎ方の具体例を示すといった教授上の工夫がなされている。今後わが国で自傷予防教育プログラムを開発する際にも、本研究の結果を踏まえ、単に「大人につなげること」の重要性を強調するだけではなく、関わりへの不安を低減させる正確な情報提供と、相談の同行等も含めた「積極的なつなぎ方」のトレーニングを同時に組み込んでいく必要があると思われる。

次に、図1のI軸・II軸ともに値が負の方向に目を向けると、「話をじっくり聞く」と「心配していることを伝える」という2つの援助行動の項目と、「悲しみ」、「怒り」、「心配」という3つの感情体験の項目が近接して布置された。このことから、「話をじっくり聞く」や「心配していることを伝える」といった援助行動の背景には、「悲しみ」や「怒り」、「心配」といった感情体験が関連しているものと考えられた。先行研究では「怒り」の感情は一般的に援助提供の増加と負の相関関係にあることが明らかにされているが<sup>30)</sup>、本研究の結果からは、身近な自傷者の話を傾聴したり、心配していることを伝えるといった援助行動に関しては、その背景に「悲しみ」や「心配」とともに「怒り」の感情が葛藤的に併存することで、いわば「感情的に巻き込まれた援助行動」となって生じやすくなることが示唆された。もちろん、「話をじっくり聞く」ことや「心配していることを伝える」こと自体は自傷者に対する重要な援助行動であると考えられるが、こうした行為が感情的に巻き込まれた状態で行われるとすれば、若者たちは自分たちだけで重大な問題を抱え込ん