EXPLORATORY STUDY ON FACTORS ASSOCIATED WITH SUPPORT PROVIDED BY ELEMENTARY SCHOOL TEACHERS TO CHILDREN HAVING A PARENT WITH CANCER

Yuko Akagawa¹, Taichi Hatta², Kaori Osawa³, Mai Narita^{4,5}, Kingo Endo⁶, Tomoko Ito¹, Hideaki Andoh^{1,5}, Sachiko Makabe¹

- 1 Department of Nursing, Akita University Graduate School of Health Sciences, Akita, Japan
- 2 Shizuoka Graduate University of Public Health, Shizuoka, Japan
- 3 Tokyo Kyosai Hospital, Cancer Consultation Support Center, Tokyo, Japan

4 Akita Mental and Developmental Clinic for Children, Akita, Japan

Akita City, Japan

national average rate

Cancer incidence rate

The number of 30~50's

cancer incidence rate per

100,000 people in Akita

* National average: 78.3-682.5

was higher than

is 105.0~762.1.

- 5 Center of Palliative Care, Akita University Hospital, Akita, Japan
- 6 Akita High School, Akita, Japan

Keywords: Children with a parent who has cancer, Elementary school, Emotional support, Knowledge, and Anxiety

Background & Aim

In Japan, elementary school students represent the largest proportion of children with a parent who has cancer. Therefore, appropriate support in schools is important. This study aimed to explore the backgrounds of teachers and staff members and to determine their ability to recognize need for providing support, knowledge of cancer, and anxiety regarding provision of support to children having a parent with cancer. Factors associated with the availability of support to children were also explored.

Methods

Recognition of support Teachers' background /knowledge/anxiety Status of support Contents of Support Difficulties in support

Conceptual diagram

[Support for children who have parental cancer]

Necessary information

Subjects: Elementary school teachers and staffs in Akita City.

Study design: A cross-sectional questionnaire survey (mail survey method)

Survey period: August 2022 to October 2022

Survey: Characteristics (gender, current position, age, and cancer experience, etc.),

Recognition of support (5 items), **knowledge** (9 items), and **concerns** (3 items) were rated using a 10-point Likert scale. Degree of difficulty, reasons for providing 🐔 support (free description), and details of support.

Analysis: Descriptive statistics were performed for examining staff's background and details of support. Objective variables were availability of support and explanatory variables included: teacher's characteristics and staff and their recognition, knowledge, and anxiety, and factors related to providing support.

Logistic regression analysis was performed using JMP®13.0 (SAS Institute) statistical software.

Results

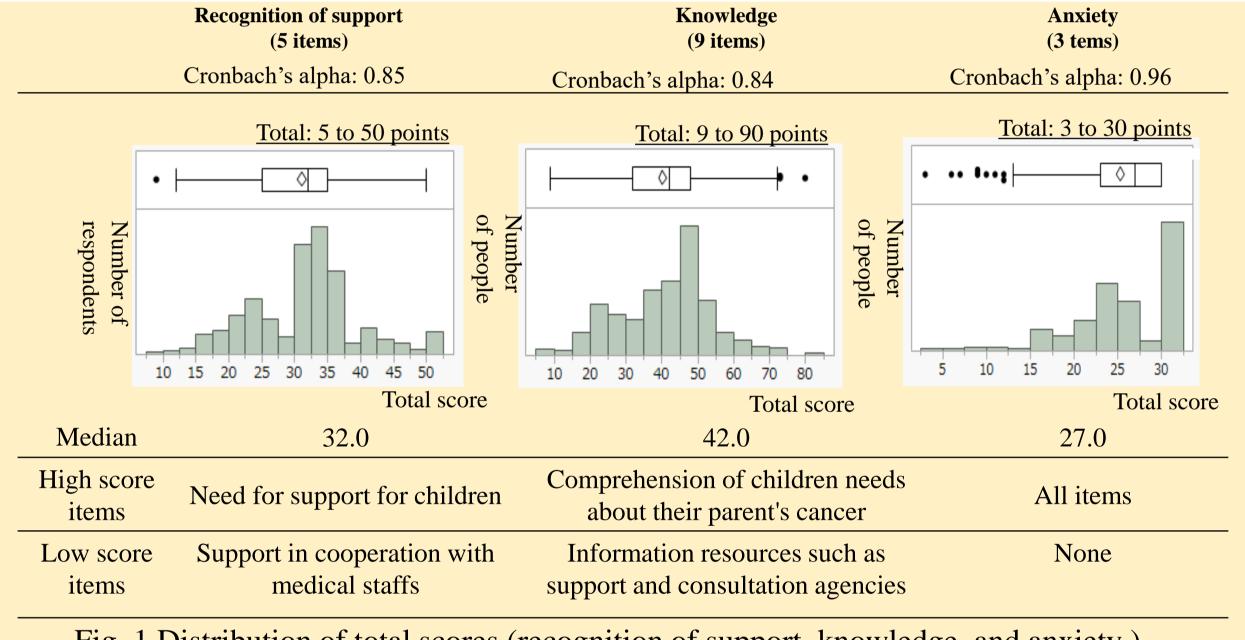
Overall, 21 elementary schools in Akita City participated (52.5%), and 500 participants responded (response rate: 91.6%).

1. Characteristics of participants

Types of collaboration

► Teachers accounted for the largest proportion of participants at 91.8%, with 70% having prior experience with a family member with cancer. ► Anxiety about providing support was high.

Item	Contents	Number of individuals (%)		
Sex	Female	344 (68.8)		
	Male	155 (31.0)		
Children	Present	310 (62.6)		
	Absent	185 (37.4)		
Position	Teacher	459 (91.8)		
	Manager	32 (6.4)		
	Nurse-teacher	9 (1.8)		
Own cancer experience	Yes	38 (7.6)		
	No	461 (92.4)		
Experience with a family	Yes	350 (70.3)		
member with cancer	No	148 (29.7)		
Bereavement experience	Yes	274 (55.0)		
due to cancer	No	224 (45.0)		



- Fig. 1 Distribution of total scores (recognition of support, knowledge, and anxiety)
- **Experience** with support for 270 respondents (54.0%). 2. Support
 - ► Children most frequently requested consultation (67.0%).
- ► Overall, 461 respondents (94.3%) had difficulties in providing support.
- ▶ Teachers and staff ensured that children felt safe.
- Consultants: A total of 176 children (67.2%) and 50 mothers diagnosed with cancer (19.1%), and 15 spouses without cancer (5.7%)
- Parental status: Overall, 179 (67.0%) parents recently diagnosed with cancer
- Consultation concerns from children: Overall, 258 (52.3%) had concerns

about daily of life with their parents

- Reasons for difficulties in providing support (freely stated) N = 461
- · Difficulty in understanding needs due to concerns about how far they should do.
- · Do not know how to provide appropriate support.
- · I, myself sense the despair.
- Busy daily schedule does not allow time for support, etc.

3. Factors associated with support ▶ Four knowledge and two awareness factors were relevant. ▶ Background was not relevant.

		Multivariate					
	Beta	SE	OR	95% Confidence Interval	P-value	VIF	
Knowledge: Children's understanding of their parent's cancer	2.20	0.42	9.06	3.95–20.75	< 0.01	2.46	
Recognition: Support for families	1.63	0.50	5.11	1.93-13.50	< 0.01	2.05	
Recognition: Support for children	0.88	0.41	2.42	1.07-5.43	0.03	2.42	
Knowledge: Physical effects on children	1.17	0.42	3.22	1.42–7.31	< 0.01	1.74	
Knowledge: Impact on family relationships	1.24	0.40	3.46	1.59–7.53	< 0.01	2.68	
Knowledge: Considerations in communication with children	0.93	0.42	2.54	1.12-5.72	0.03	2.02	

Logistic regression analysis was performed on 24 items, with 25 forced explanatory variables and one variable with high VIF was excluded. r-square = 0.73. In this table, only significant variables are shown.

Discussion

The highest number of consultations from children was noted when their parents were diagnosed with cancer.

The reason was that parents themselves are upset that their lives are changing. Children were also prone to experience anxiety.

Those with support experience had more in-depth knowledge and recognition.

The specific learning content for gaining knowledge was based on the teacher's background. The limitations identified included the need for individualized support for children. The number of individuals requesting use of the service was high; thus, a collection of practical examples of the types of support to provide is needed.

Regardless of the presence or absence of support, there was a high level of

anxiety about providing support among staff

Schools and medical caregivers should collaborate to provide support to children in terms of dealing with anxiety. In addition, it is important to provide reliable resources and information on counseling agencies.

Conclusion

Factors related to support were "understanding the child," "physical impact on the child," "impact on family relationships," and "communication with the child" with regard to information and "support for the child" and "support for the family" with regard to awareness.

Cooperation between schools and medical caregivers is important to enhance support in schools.

In the future, medical and nursing staffs will provide schools with information on the diagnosis of a parent's cancer and the child's reaction to the diagnosis as well as on intervention approaches. It is important to establish a contact point with health care

professionals that is available to teachers for consultation whenever they need help.

Ethical considerations and conflicts of interest

This study protocol was approved by the Ethics Committee of Akita University (No. 2838). This work was supported by JSPS KAKENHI Grant-in-Aid for Early-Career Scientists Number 20K19164. Declaration of Interest: none.