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2024 Fukushima Medical University International Symposium on the Fukushima Health Management Survey

Secretariat of International Symposium

Office of Public Communications and International Cooperation, Radiation Medical Science Center for the Fukushima Health Management Survey, Fukushima Medical University

✉ kenkani@fmu.ac.jp, TEL: +81-24-581-5454 (Weekday, 9a.m. - 5 p.m. JST)

Mental Health and Lifestyle Survey

Current issues of mental health among
affected people after the Fukushima disaster:
The importance of human bonds in society

Fukushima Medical University

HORIKOSHI Naoko, MAEDA Masaharu

Purpose of MHLS (Mental Health and Lifestyle Survey)

MHLS aims to

- Follow mental health and lifestyle-related issues among affected people based on a long-term view
- Provide adequate, individually tailored support involving health and welfare service according to results of MHLS



We are conducting telephone support for affected people at risk of physical and/or mental health problems.

Survey population

- Approximately 210,000 residents who, at the time of the disaster, were living in 13 municipalities that were designated by the Japanese government for evacuation.

- We divided all the participants into 5 groups according to age.

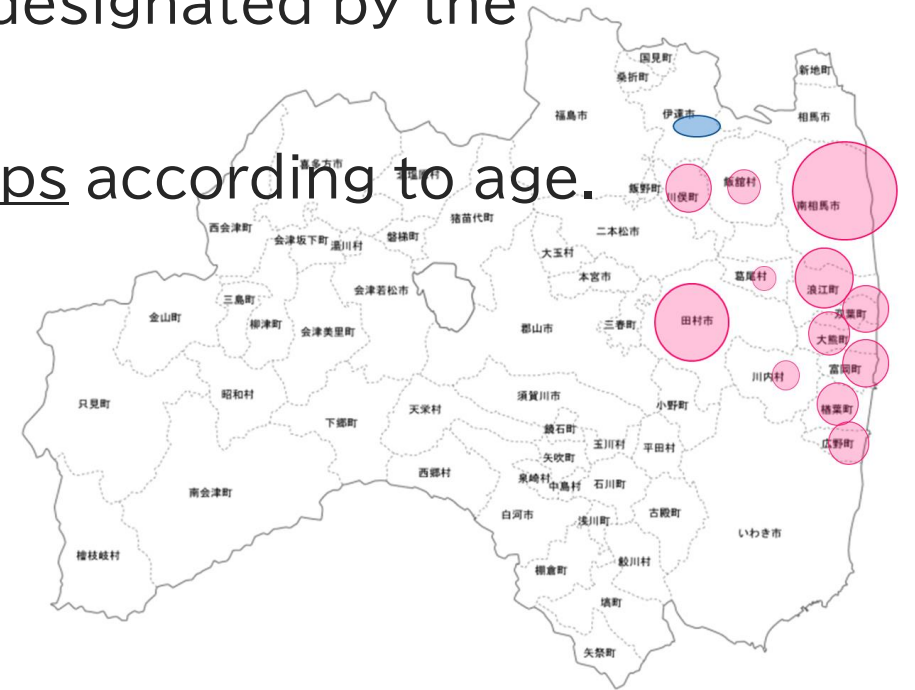
① Age 0-3

② Age 4-6

③ Elementary school (age 7-12)

④ Junior high school (age 13-15)

⑤ Adult (16 years and older)



This survey has been performed yearly since January 2012.

Main survey items

➤ **Children (under junior high school age)**

Strengths and Difficulties Questionnaire (SDQ: age 4+), subjective health, height and weight, sleep, exercise, eating habits, presence or absence of developmental or psychological problems.

➤ **Adults (16 years and older)**

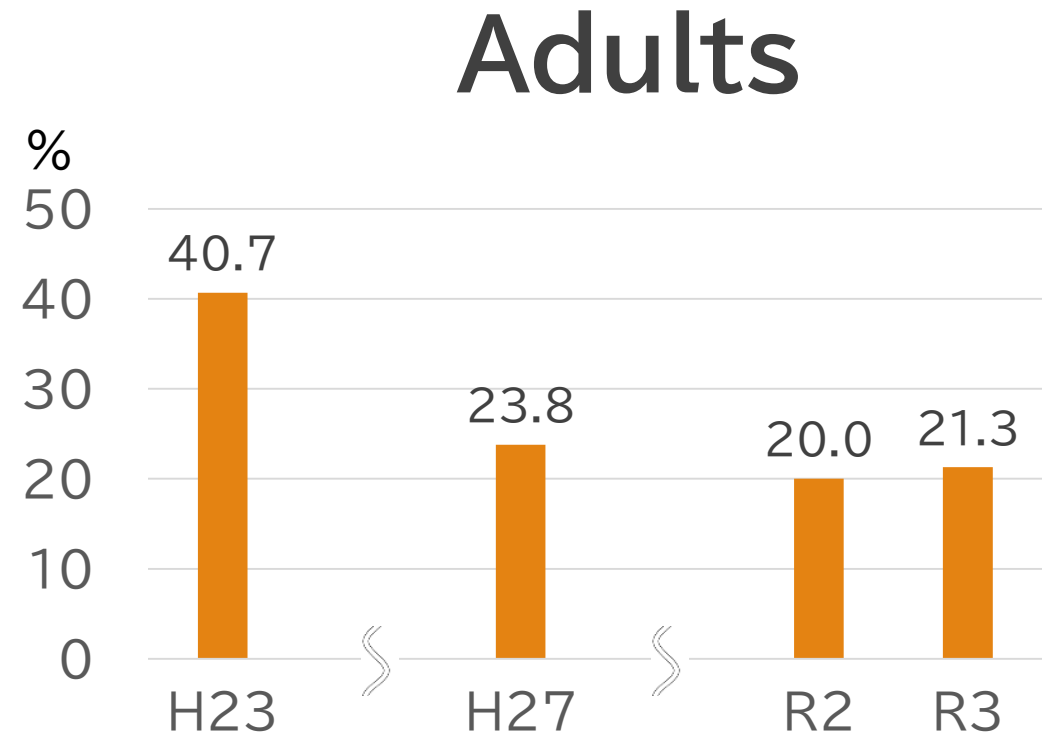
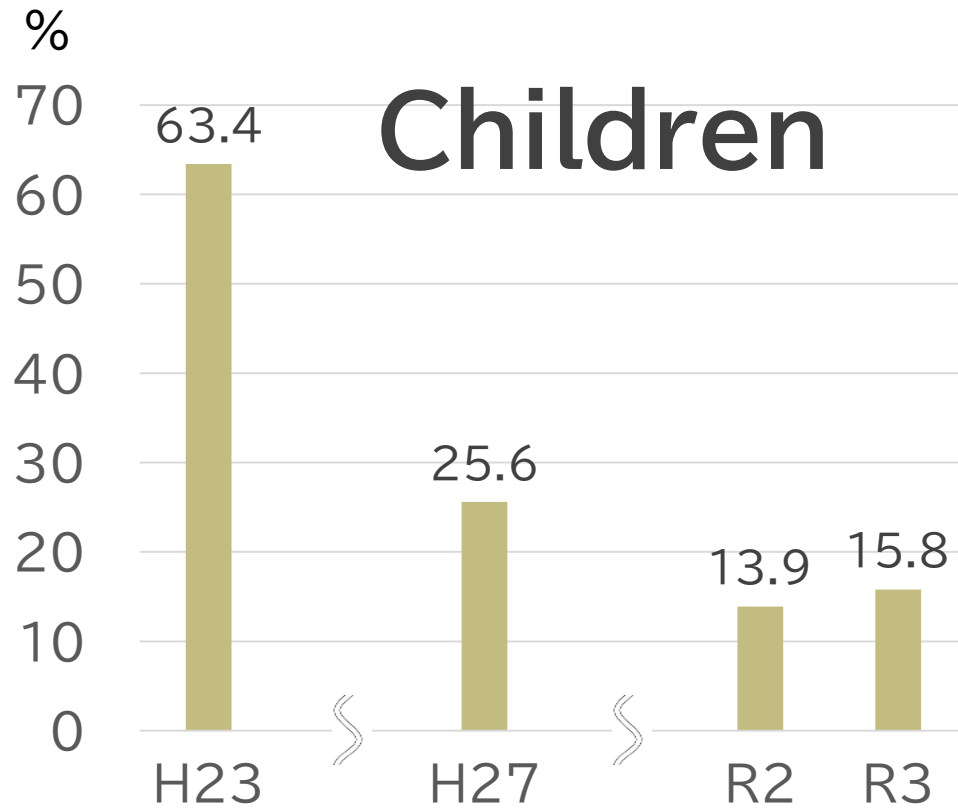
General mental health (K6), trauma (PCL), subjective health, height and weight, medical history, diet, sleep, smoking, alcohol consumption, exercise, radiation risk perception, etc.

※ **Free description**

(Free space to state any questions or concerns about the survey)

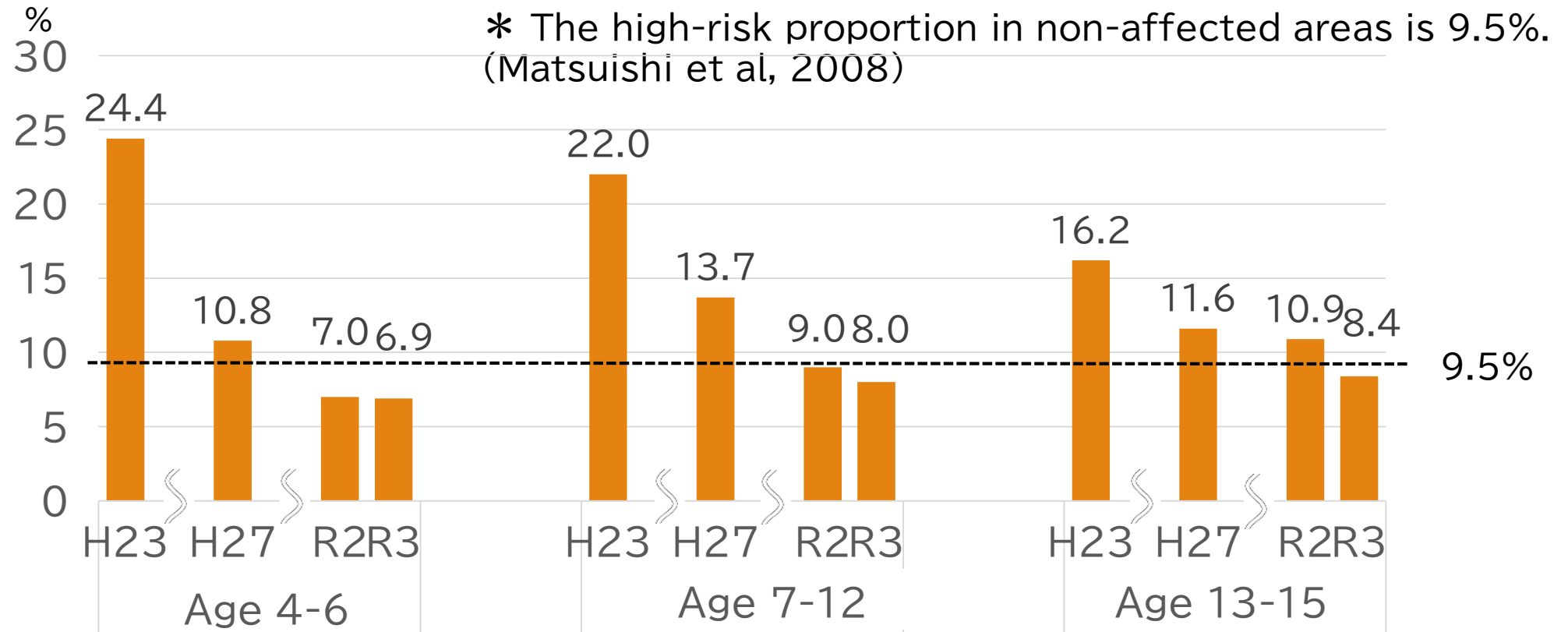
Results of the survey

Response rate



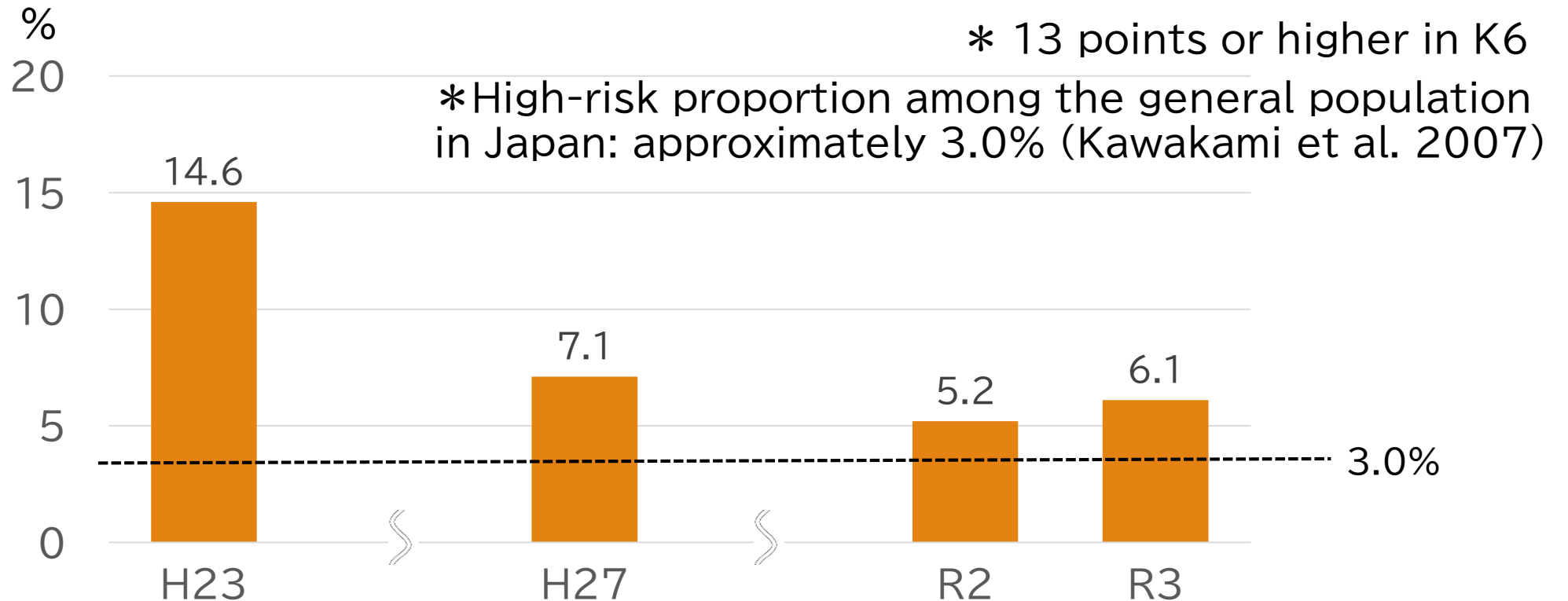
From the report to the 48th Prefectural Oversight Committee meeting

Strengths and Difficulties Questionnaire(SDQ) Proportion of children with 16 points or higher



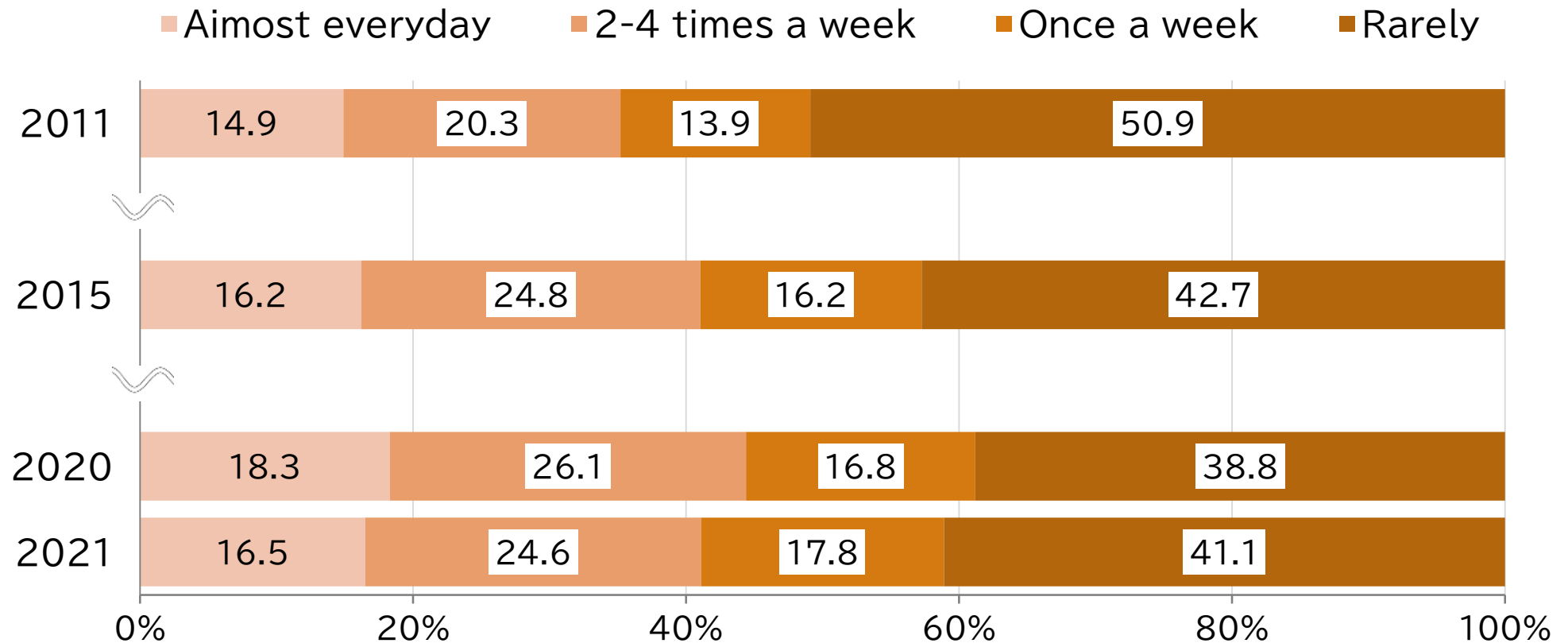
From the report to the 48th Prefectural Oversight Committee meeting

Proportion of adults at high risk of general mental health problems, based on K6



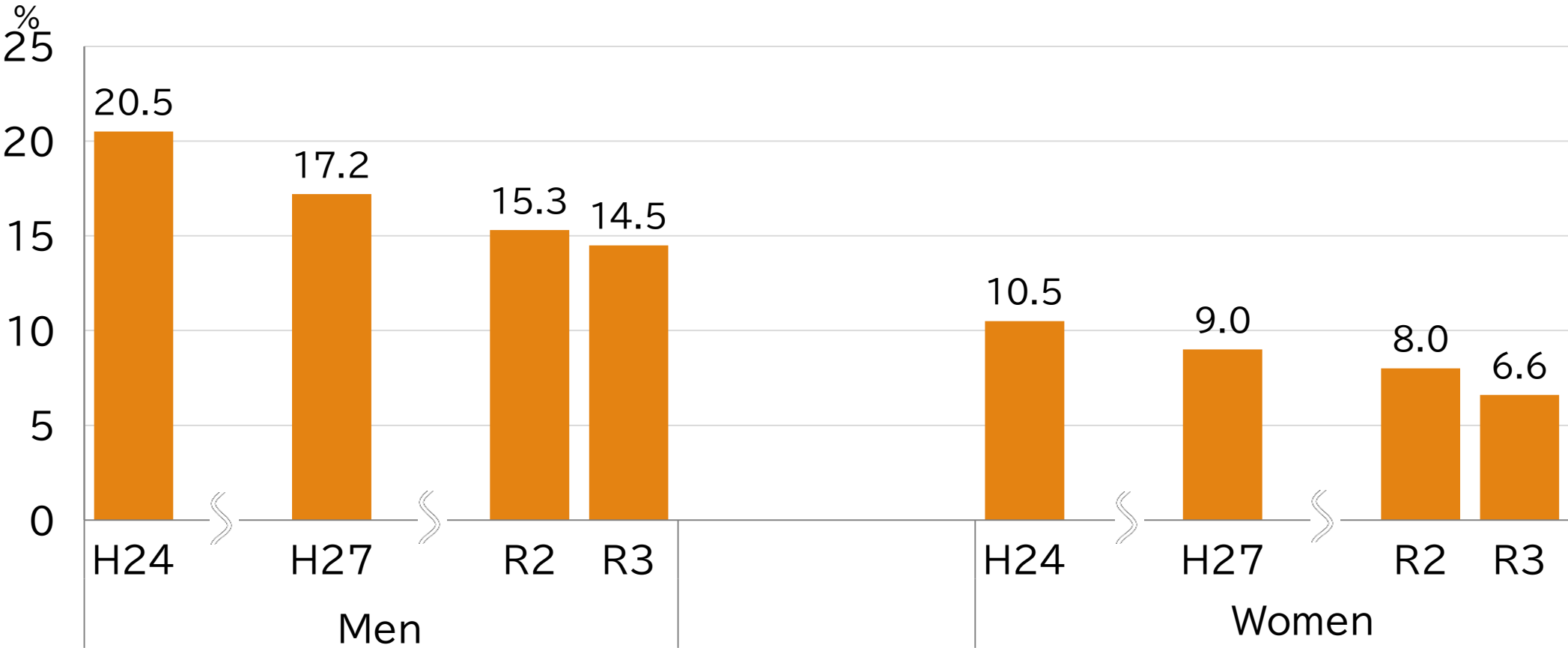
From the report to the 48th Prefectural Oversight Committee meeting

Frequency of daily exercise among adults



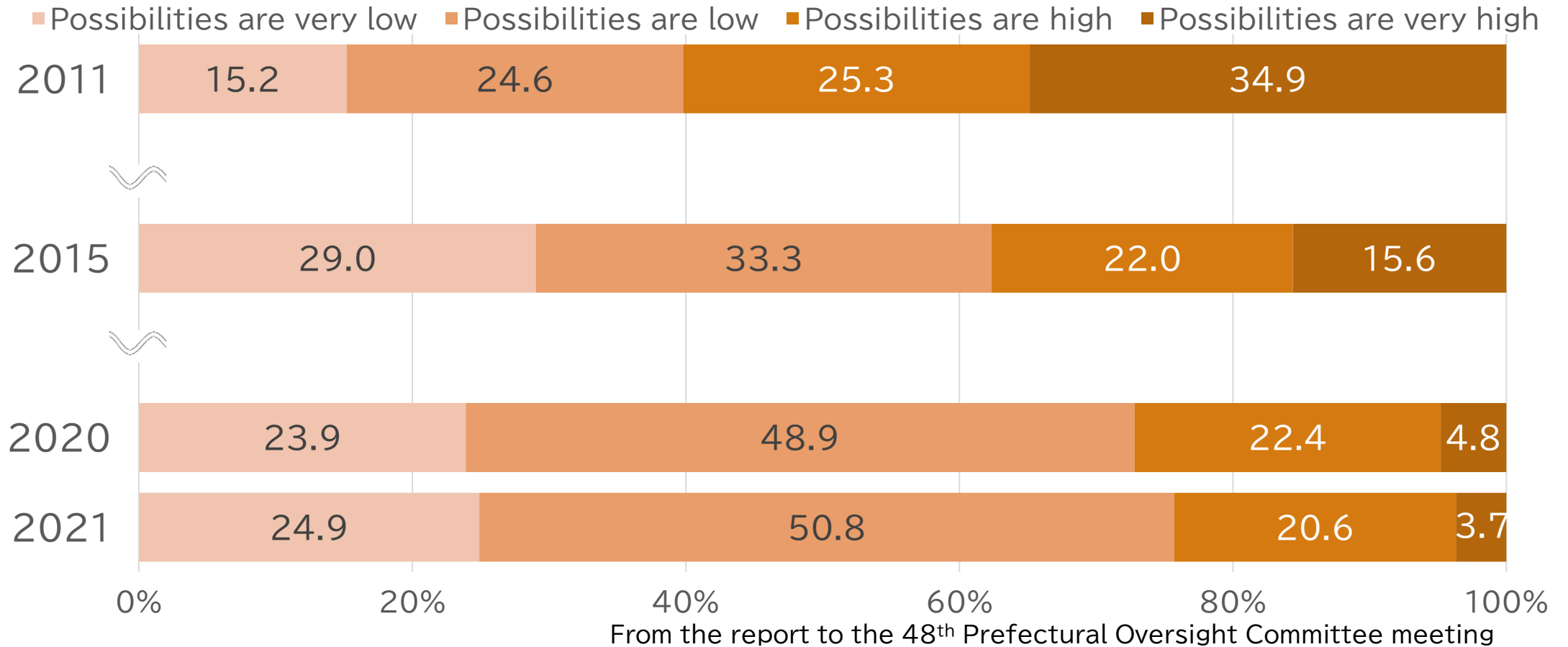
From the report to the 48th Prefectural Oversight Committee meeting

Changes in proportion of those disclosing evidence of problematic drinking (2 points or higher in CAGE), by gender

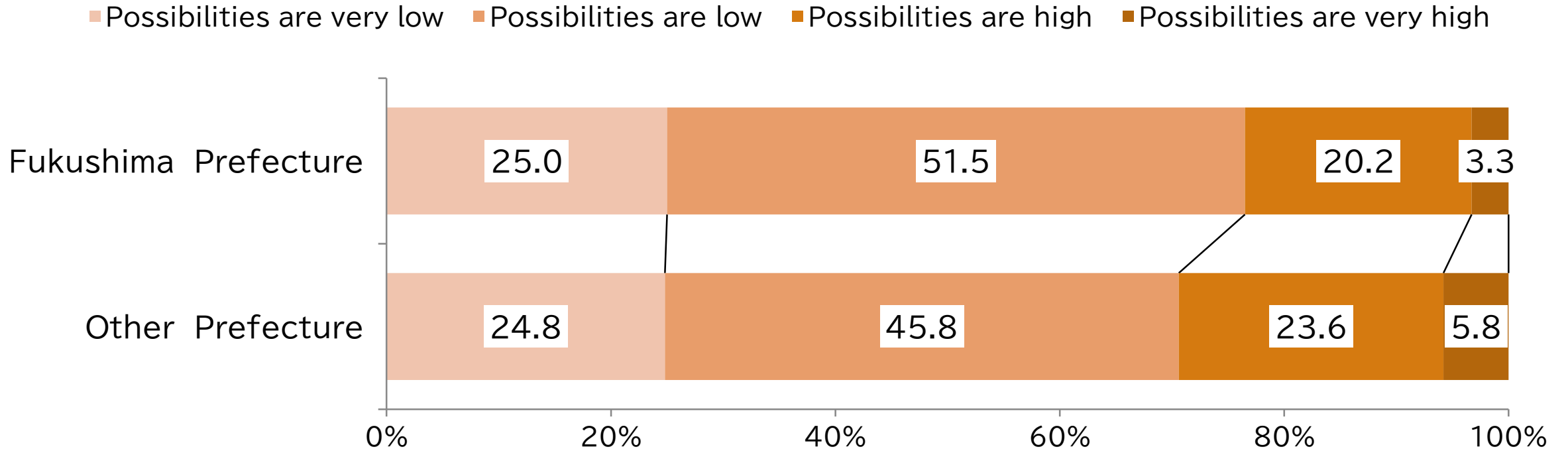


From the report to the 48th Prefectural Oversight Committee meeting

Changes in risk perception of next-generation radiation effects

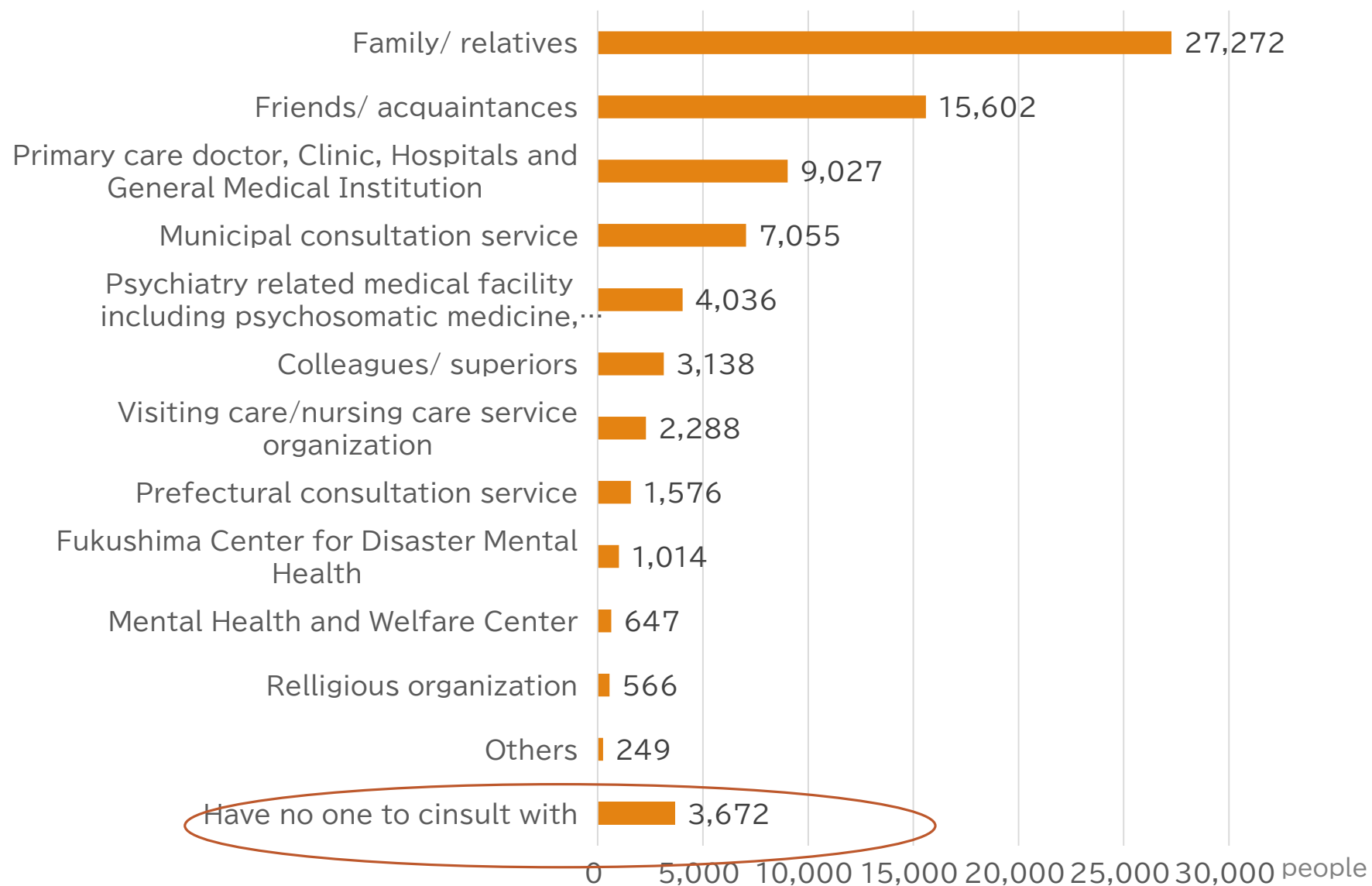


Risk perception of next-generation radiation effects in FY2021 Survey, by location of residence at the time of the survey



From the report to the 48th Prefectural Oversight Committee meeting

FY2020 Consultations (multiple responses)



From the report to the 45th Prefectural Oversight Committee meeting

People not having someone to consult

Proportion of those in MHLS : approx. **11%**

【 Profile 】

- ◆ 40~64
- ◆ Male
- ◆ Poor financial state
- ◆ Living alone

It is important to ask if the person has someone to consult with.



	Not having	Having
General mental health K6 \geq 13	16.2%	5.6%
Problem drinking CAGE \geq 2	21.5%	13.5%

Horikoshi et.al., IJERPH, 2021, 18(19):10075.

The impact of the presence of family members who can be consulted, and psychological stress

Who are the people who have not been able to consult their families?



We suggest that asking evacuees whether they not only have people to consult, but also whether they are able to consult their families, could lead to early detection of high risk individuals.

Those who did not consult family members had a 1.33 times higher risk of K6 (≥ 5 points) than those who did.

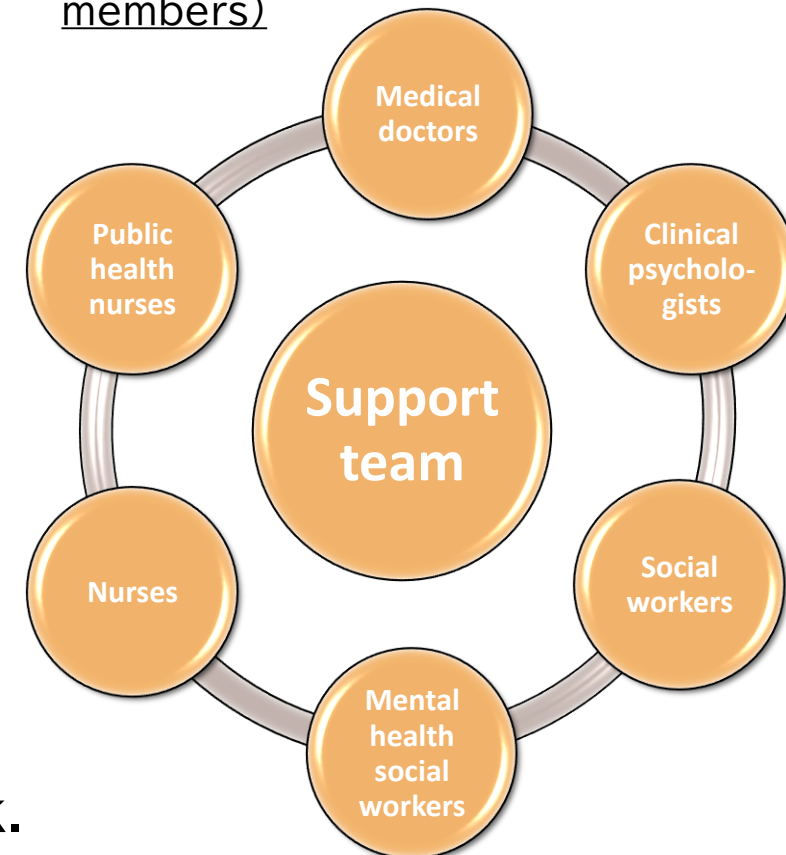
Connecting response results to support

【Connect with affected people】

Outreach telephone support

- We provide **outreach telephone support** for the respondents identified as in need of support according to the results of MHLS.
- The telephone support is conducted with active listening and includes secondary screening, suggestions, psychoeducation, and referral to other facilities (clinics, local care centers, etc.) as needed.
- Approximately 40,000 respondents in total have received the support so far.
- On-call service is also available for all the eligible people seeking help, not limited to those at high risk.

Support team (approx.20 members)



Criteria for support

Children (≤ 15)

- Emotional and behavioral problems (SDQ)
- Developmental issues
- Someone to consult with
- Problems in school
- Other troubles

Adults (≥ 16)

- General mental health (K6)
- Posttraumatic responses (PCL)
- BMI
- Past and current medical history (physical and mental issues)
- Sleep
- Smoking
- Problem drinking (CAGE)
- Other troubles

*These criteria may change depending on the survey year

Confirm selection criteria for telephone support through interviews

Eight months after the start of the study, we conducted interviews with affected people and others sheltered in temporary housing. The results showed that the screening efficiency of the selection criteria for telephone support at that time was adequate.

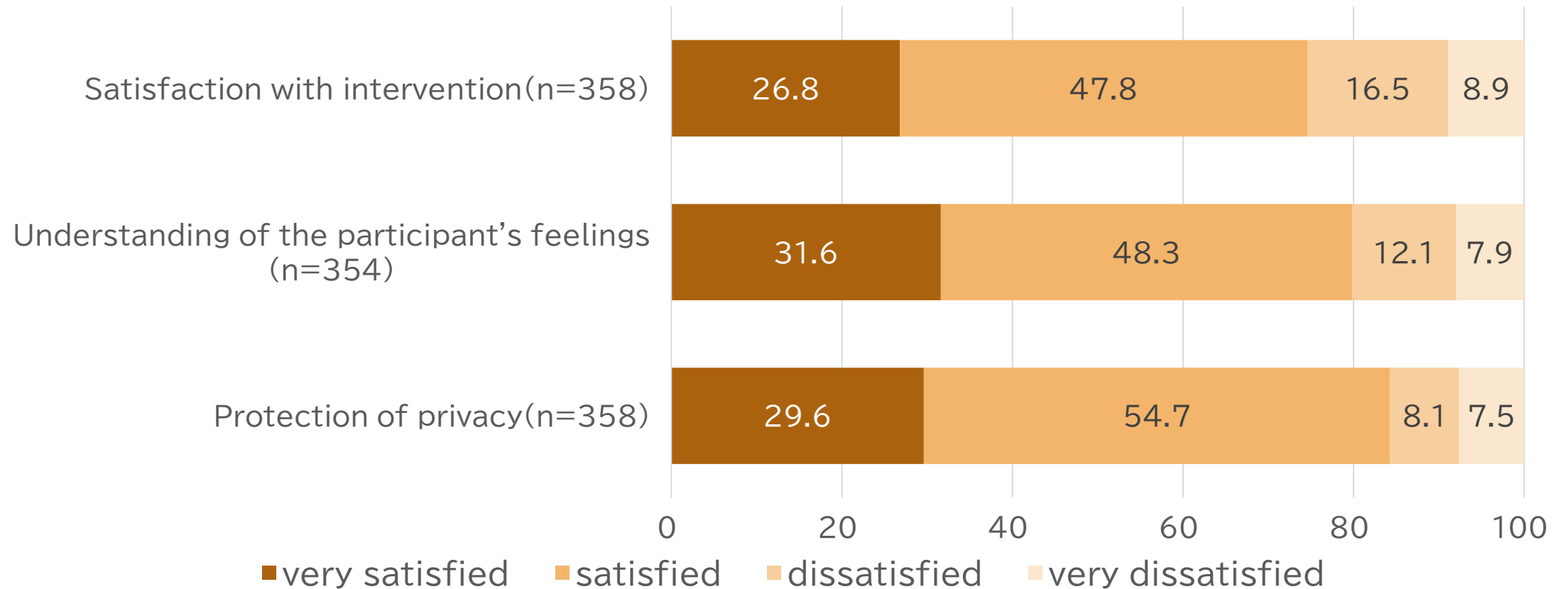


【 Research in the affected areas 】

This interview survey was positioned as a survey with support, and the surveyors were public health nurses and others who had received prior training. We asked our surveyors to visit the affected areas and to bring maps of Fukushima Prefecture and blood pressure monitors with them. We believe that the fact that the PHNs, as surveyors, were able to directly listen to the needs of the evacuees and provide advice on living during the evacuation at the same time, served as a model for future surveys to be conducted in the affected areas.



Impressions of our telephone support

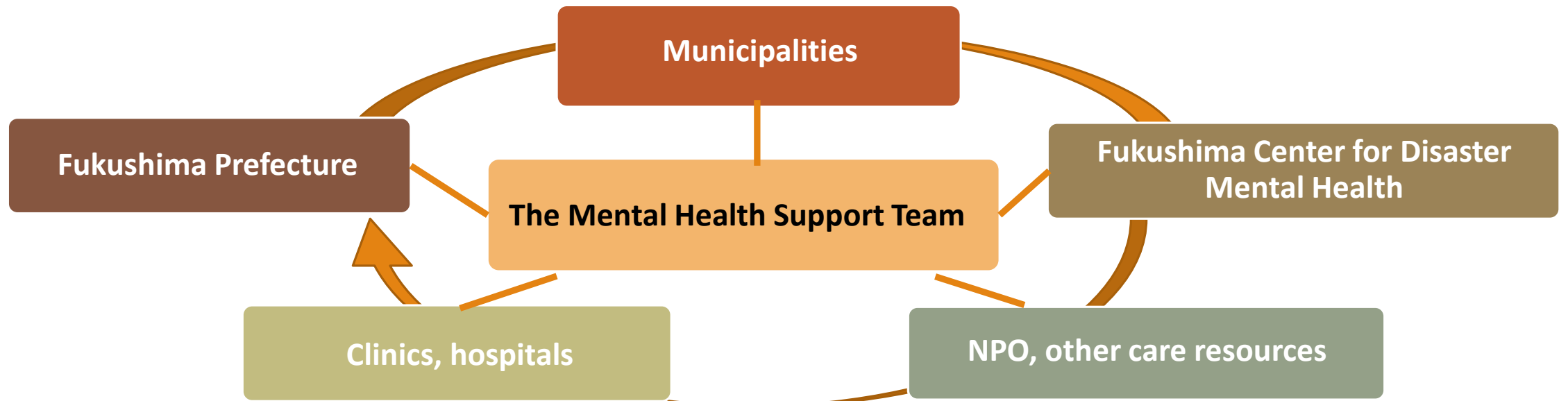


From the report to the 31th Prefectural Oversight Committee meeting

【Connect with supporters】

Connect with various support organizations

- We believe that having regular opportunities for information sharing with municipalities, the Fukushima Center for Disaster Mental Health, and other support organizations, and understanding each other's situations will enable prompt response to the problems of the affected population and provide a wide range of support.



【Connect with the community】

Connect with municipalities in the affected area

➤ **Understanding and cooperation with the implementation of the survey**

Letter from the municipality enclosed with the survey form

Questionnaires incorporating opinions of the municipality

➤ **Sharing of support information**

Regular information exchanges on individual cases in all 13 municipalities meeting

➤ **Seamless support for affected people in need**

Support through visits and ongoing support

➤ **Effective use of accumulated data**

Use in PR magazines, health education, comprehensive plans of municipalities, etc.

【Connect with time】

Strengths of long-term support

➤ The importance of looking after each and every affected person every year through the survey form.

- Ten years after the disaster, affected people gave their answers for the first time

Sometimes people need time to come to terms with the disaster

- Support for affected people who have not responded to the survey.

From the interview survey, we found that non-respondents were employed, socially isolated, and had psychological stress reactions. As they were people with high psychological stress reactions, direct support was not possible, but information on various counselling services and leaflets to enhance self-care were enclosed with the survey form.

Summary

- We found that children's and adults' mental health improved markedly compared to the first year, but for adults, recovery has since slowed down and is still higher than the national indices. On the other hand, there was a gradual improvement in lifestyle habits, such as exercise and problem drinking.
- We have provided telephone support with approximately 3,000 calls per year, and in total more than 40,000 affected people have been reached so far. The results of the interview survey showed that satisfaction with the telephone support was generally high and showed some usefulness.
- In the course of our survey and support, we feel the importance of connections, including various people, organizations and time, such as individuals (affected people), supporters (various support organizations), communities (affected municipalities, etc.), and time (long-term support).

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