



## 2023 Fukushima Medical University International Symposium on the Fukushima Health Management Survey, “Thinking Together about Health, Life, and our Future in Fukushima”

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### Abstract

In response to the release of radioactive materials and evacuation of residents after the Tokyo Electric Power Company's Fukushima Daiichi Nuclear Power Plant accident, caused by the Great East Japan Earthquake, the Fukushima Health Management Survey (FHMS) began in June of 2011. This survey aims to provide long-term follow-up of the physical and mental health of Fukushima residents and to maintain and improve their health for the future. Every year since 2019, Fukushima Medical University (FMU) has organized the FHMS International Symposium to share survey results with people in Fukushima Prefecture and beyond. The fifth annual symposium convened at FMU's Ekimae Campus on Saturday, 4 March 2023, with the theme, “Thinking Together about Health, Life and our Future in Fukushima.”

### Introduction

The release of radioactive materials after the Tokyo Electric Power Company's Fukushima Daiichi Nuclear Power Plant accident, caused by the 2011 Great East Japan Earthquake, prompted mass evacuation of residents living in designated areas. In response, the Fukushima Health Management Survey (FHMS) began in June of 2011, entrusted by Fukushima Prefecture to the newly established *Radiation Medical Science Center for the Fukushima Health Management Survey* at Fukushima Medical University (FMU). This survey aims to provide long-term follow-up of the physical and mental health of Fukushima residents and to maintain and improve their health for the future.

The annual Fukushima Health Management Survey International Symposium, which began in 2019, aims to share FHMS results with the people of Fukushima Prefecture and beyond. The fifth symposium convened on Saturday, 4 March 2023 at

FMU's Ekimae Campus under the theme, “Thinking Together about Health, Life and our Future in Fukushima” (**Figure**, <https://fhms.jp/en/symposium/2023/>). As in the previous year, the 2023 event was a hybrid of on-site and online participation. Presentations and follow-up discussions, based on questions from the audience, proceeded in Japanese and English with the help of simultaneous interpreters. Proceedings in both languages were made available to anyone with access to YouTube.

### Program of the symposium

#### Opening Session

FMU President TAKENOSHITA Seiichi said, “Based on the data, findings and initiatives obtained from more than 10 years of the FHMS, I would like to invite the many researchers who have participated from Japan and abroad to engage in lively discussions and opinions from their own specialist per-

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spectives.”

The Governor of Fukushima Prefecture, UCHIBORI Masao, was represented by Vice Governor SUZUKI Masaaki, who noted that the prefecture will continue to work closely with FMU to address ongoing concerns of the people of Fukushima Prefecture and to maintain and promote their health.

Dr. KAMIYA Kenji (FMU and Hiroshima University) overviewed results of the FHMS recently reported in the peer-reviewed Journal of Epidemiology<sup>1)</sup>. Dr. KAMIYA's presentation was chaired by Dr. OHTO Hitoshi (FMU).

*Session 1: Weaving Scientific Evidence into our Thoughts on Health: chaired by Dr. OHIRA Tetsuya (FMU) and Dr. ISHIKAWA Tetsuo (FMU)*

1-1 Keynote Lecture: *Understanding of the causes and trends in thyroid cancer incidence.* Dr. Cari M. KITAHARA (National Cancer Institute, USA) noted that since the 1970s, thyroid cancer incidence has increased substantially across much of the world, with country-to-country variation. This apparent increase in thyroid cancer incidence has been largely considered an “epidemic of diagnosis,” reflecting the improved ability to detect and diagnose small, mostly indolent, thyroid tumors in recent decades<sup>2)</sup>. She also suggested that the rising prevalence of obesity may have contributed to thyroid cancer incidence trends in countries such as the United States and Australia<sup>3)</sup>. From above, she stated that in Fukushima, avoiding over-diagnosis and over-treatment, as well as avoiding obesity in young people, are considered the most effective means of basic prevention of thyroid cancer.

1-2 *Factors associated with the development of thyroid cancer identified in thyroid examinations.* Dr. SHIMURA Hiroki (FMU) reported that at present, there is no statistically significant relationship between radiation dose from the 2011 nuclear power plant accident and the detection rate of nodules diagnosed as malignant or suspicious for malignancy.

1-3 *Evidence on non-communicable diseases: Lessons from the Fukushima Health Management Survey.* Dr. SHIMABUKURO Michio (FMU) reported that the onset of lifestyle-related diseases after the nuclear accident was related to changes in lifestyle associated with the evacuation, rather than any direct effect of radiation dose.

1-4 *Remote support for affected people following 2011 Fukushima disaster: Telephone intervention combined with the Mental Health and Lifestyle Survey.* Dr. MAEDA Masaharu (FMU) reported about

The image shows a flyer for the 2023 Fukushima Medical University International Symposium. At the top, it features the Fukushima Medical University logo and the slogan "Build Back Better, Together". The title of the symposium is "Thinking Together about Health, Life, and our Future in Fukushima". Below the title is a photograph of a cherry blossom-lined street. The flyer includes the following information:

- March 4<sup>th</sup> (Sat), 2023**
- Time:** 9:00-18:00 (JST)
- Cost:** No costs, simultaneous interpretation available
- Venue:** Fukushima Medical University, Fukushima Eicom Campus (Multi-purpose hall)
- Intended Audience:** Residents of Fukushima Prefecture, health care workers, students, administrative officers, and others. The application is open to everyone.
- Application Deadline:** February 20<sup>th</sup> (Sun)
- For application and further information:** Please see the back side.
- Viewing via Zoom:** Advance application required.
- Number of Seats:** 75 (Advance application required). If there are too many applicants, a random selection will be applied. Results of applications will be notified after the deadline.
- Organizer:** Medical Science Center for the Fukushima Health Management Survey, Fukushima Medical University
- Secretariat:** Office of Public Communications and International Cooperation, email: ksenian@fmu.ac.jp

Figure. Program and abstracts of 2023 Fukushima Medical University International Symposium on the Fukushima Health Management Survey “Thinking Together about Health, Life, and our Future in Fukushima”

telephone-based mental health support for those who need it.

1-5 *Effects of external radiation exposure on perinatal outcomes in pregnant women after the Fukushima Daiichi Nuclear Power Plant accident: The Fukushima Health Management Survey.* Dr. YASUDA Shun (FMU) noted that external radiation dose due to the Fukushima Daiichi Nuclear Disaster was not associated with incidence of congenital anomalies, low birth weight, small size for gestational age, or preterm birth, based on rigorous binominal logistic regression analysis.

*Session 2: Health Communication: Valuing Facts and Feelings for our Future: chaired by TSUBOKURA Masaharu (FMU) and TAMAKI Tomoaki (FMU)*

2-1 Keynote Lecture: *Health Literacy: Increasing Access to Information, Care, and Services.* Dr. Rima E. RUDD (Harvard T.H. Chan School of Public Health, USA) said that attention to an expanded concept of health literacy can contribute to ongoing efforts to increase access to information,

services, and care, thereby reducing disparities<sup>4)</sup>. The new interactive model of health literacy focuses on five key factors that help us communicate more clearly : personal skills, professional skills, quality of writing, task complexity, and health system characteristics. It is possible to improve health literacy by changing at least two of these elements. It can improve overall health literacy and increase people's interest and ability to act<sup>5)</sup>. Findings and suggestions from health literacy research have shown that participatory and dignified dialogue can facilitate efforts to disseminate knowledge to the general public, build trust, and reduce disparities.

*2-2 Health literacy promotion in Fukushima and beyond.* Dr GOTO Aya (FMU) presented health literacy training for health professionals and "Creative Health" initiatives in elementary schools.

*2-3 Development of a collaborative community – aiming to create a town of fukushi (happiness/well-being).* Mr. SATOH Tsutomu (Naraha Town Council) reported on the creation of a communication mechanism for the "implementation of a town of social welfare" in Naraha, a disaster-affected area.

*2-4 Reputational damage and distribution damage in radiation disasters after the accident at TEPCO's Fukushima Daiichi Nuclear Power Station.* Dr. SEKIYA Naoya (The University of Tokyo) reported on studies of reputational damage after the Fukushima Daiichi Nuclear Disaster.

### Closing Session

Dr. HAZAMA Akihiro (Vice President, FMU) closed the symposium with these words : It was a great pleasure to see such a wide range of perspectives, thought-provoking discussions, and many meaningful insights. FMU will continue to contrib-

ute to the reconstruction of Fukushima and the creation of its future by deepening cooperation with the rest of the world and continuing to support the health of the people of the prefecture by staying close to each and every one of them through the Fukushima Health Management Survey.

### Conflicts of interest

The authors declare no conflicts of interest pertaining to this manuscript.

### Disclosure Summary

The authors have no disclosures pertinent to this manuscript.

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