



東北大学



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Tohoku University
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ToMMo completed the ToMMo Child Health Study in Miyagi Prefecture during a period of four years after the Great East Earthquake

Key Points

For the period of FY2012 to FY2015, the prevalence of eczema or clinical range on the Strengths and Difficulties Questionnaire (meaning the experience of some form of difficulty in daily life) was relatively higher for children who experienced the tsunami or a housing change than for children who did not have such experiences.

However, with each successive fiscal year, among the children who experienced the tsunami or a housing change, the odds ratio for eczema or some form of difficulty in their daily lives tended to decrease.

Tohoku University Tohoku Medical Megabank Organization (ToMMo) conducted a questionnaire survey as part of the ToMMo Child Health Study from FY2012 to FY2015 in Miyagi Prefecture. The purpose of this study was to address the health needs of children who are at risk of increased illnesses or a worsening of symptoms following the Great East Japan Earthquake. Specifically, the study was designed to:

1. Assess the health status of children and develop measures to meet their needs;
2. Provide appropriate support to children with health concerns; and
3. Find children as quickly as possible whose symptoms and prognosis will improve with cutting-edge medical support services.

Description of the ToMMo Child Health Study of FY2012 - FY2015

■Target Area

28 municipalities in Miyagi Prefectures

■Sample

The “Children’s Health Questionnaire” was distributed through public primary and junior high schools in the target area, to 62,895 children and students in the second,

fourth, and sixth grades of primary school as well as in the second year of junior high school. The children and students brought home the questionnaire, and 17,043 parents or guardians (number of effective responses) filled out and returned the questionnaire.

■Outline of Study Findings

In terms of respiratory and skin symptoms, 1,468 children had symptoms of wheeze, and 3,283 children had symptoms of eczema. Of the children who were not receiving any treatment or diagnosis despite having strong symptoms, 94 children had wheeze, and 116 children had eczema. A Strengths and Difficulties Questionnaire (SDQ) was conducted to study the psychological health of children. It found that 640 children experience some form of difficulty in their daily lives and are deemed to require assistance.

For the period of FY2012 to FY2015, the prevalence of eczema or clinical range on the SDQ was relatively higher for children who experienced the tsunami or a housing change than of children who did not have such experiences. However, the odds ratio for eczema or some form of difficulty in their daily lives tended decrease over time. The aggregate findings from the questionnaire survey were notified to municipalities for the purpose of improving their health administration.

■Supports

If requested by parents or guardians, and as necessary, public health nurses and psychologists provided mental and physical health counseling, among other supports at ToMMo. Telephone counseling was provided to 1,609 children who may have severe symptoms. 110 Face-to-face meetings were also held as requested.

■The ToMMo Child Health Study is being implemented by a Tohoku Medical Megabank Project, as part of the Tohoku Medical Megabank Project Birth and Three-Generation Cohort Study.

[Related Paper]

Protocol and Research Perspectives of the ToMMo Child Health Study after the 2011 Great East Japan Earthquake. *Tohoku J. Exp. Med.* 2015; 236: 123-130

Eczema and Asthma Symptoms among Schoolchildren in Coastal and Inland Areas after the 2011 Great East Japan Earthquake: The ToMMo Child Health Study. *Tohoku J. Exp. Med.* 2015; 237: 297-305

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