Psychological Effects

Psychiatric Effects on Children

Possible psychological effects of radiation issues:

- Parents' anxiety over radiation proves that they are dedicated parents.
- Parents' excessive concern over radiation could affect children mentally and physically.

Regarding fetal exposure and neuropsychological disorders caused by the Chernobyl accident:

- The results of studies on the neuropsychological disorders of children who were fetuses at the time of the accident are not coherent.
- Although there is a report that exposure affected the IQ of the fetuses, no correlation has been found between thyroid exposure doses and children's IQs.

Regarding a questionnaire on the emotions and behavior of children in Fukushima

Tendencies found through a survey using SDQ (Strengths and Difficulties Questionnaire) as an index to evaluate the mental health of children:

- The percentage of respondents whose SDQ score was 16 or higher was 9.5% in a previous study
 targeting the general Japanese population unaffected by any disasters. Compared with this, the
 survey revealed that the percentages of those scoring 16 or higher were high in both the 4-6 age
 and 6-12 age groups.
- However, the same percentages tend to be lower in both the 4-6 age and 6-12 age groups in the survey conducted in FY2014, compared to that in FY2011, i.e., the year of the accident.

SDQ: Strengths and Difficulties Questionnaire

Source:

• A debriefing report from "Mental Health and Lifestyle Survey," Fukushima Health Management Survey in FY2014, Fukushima Medical University, June 2016
• Kolominsky Y et al., J Child Psychol Psychiatry, 40 (2): 299-305, 1999

In some of the studies targeting children who were fetuses at the time of the Chernobyl accident, investigations on neuropsychological effects were also conducted.

Although the results of the studies are not necessarily coherent, a report that attests to emotional disorders of the children caused by the accident also points out other effects such as parents' anxiety as factors affecting their mental state, rather than merely pointing out radiation exposure as a direct effect.

The Radiation Medical Science Center in Fukushima conducts the Mental Health and Lifestyle Survey with the aim of handing down to the following generations accumulated knowledge on better mental care in an emergency or in the event of a natural disaster.

The survey uses the Strengths and Difficulties Questionnaire (SDQ)* as an index to evaluate children's mental health. The higher the percentage of those scoring high (16 or higher), the more support is needed. The survey conducted in FY2011 showed rather bad results (high scores) but considerable improvements are observed in the results of the one conducted in FY2014, which have come close to the results of the surveys conducted outside the affected regions (see p.141 of Vol. 2, "Mental Health and Lifestyle Survey: What Has Become Clear (4/4)" for details).

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