Letter to the Editor

Freedom from stigma in Fukushima

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Abstract:

Six people sued Tokyo Electric Power Company due to thyroid cancer found after the Fukushima accident. Addressing concerns about health effects and stigma against Fukushima and affected individuals among the public is urgent. While the radiation exposure has not caused discernible increases in thyroid cancer among the affected children, the cause of cancer in individuals cannot be identified. The increase in thyroid cancer is attributed minorly to radiation exposure and mainly to the early diagnosis and the overdiagnosis. Importantly, post-accident cancer patients bear the burden of suffering irrespective of the cause. It is important to share scientific and social knowledge with the public, including the differences in risk assessment between population and individuals, the suffering of cancers detected by examinations, and judicial decisions as a remedy to solve the stigma issues. This will free the people of Fukushima from stigma and help empathize with the suffering of affected individuals.

Main text:

Six people recently sued Tokyo Electric Power Company because they believed thyroid cancer occurred due to radiation exposure after the Fukushima accident in 2011 [1]. Five former Japanese prime ministers referred to this when they opposed the European Commission's policy of using nuclear power as a clean energy source. The current prime minister criticized them for potentially causing discrimination against Fukushima residents. Given that judicial decisions often grant damages as a remedy, regardless of causality, addressing concerns about health effects and stigma against affected areas and individuals associated with the accident among the public is an urgent issue. Thyroid cancer has been detected by examinations on children aged < 18 years in Fukushima at the time of the accident, with an incidence rate of 1–2 orders of magnitude higher than in other regions [2]. Based on scientific evidence of low exposure dose and epidemiological studies, the international consensus is that radiation exposure has not caused discernible increases in thyroid cancer among children [3]. This does not mean that a specific cancer patient has no attributable risk due to radiation exposure [4]. The increase in thyroid cancer is attributable minorly to radiation exposure and mainly to early diagnosis and/or over-diagnosis of the cancer associated with the examination [3]. The cancer cause among individuals cannot be identified but can be explained by probabilistic contributions from various factors. Importantly, post-accident cancer patients bear the burden of suffering, whether due to radiation effects, early diagnosis, or over-diagnosis [5, 6].

To resolve the stigma issue, sharing the following scientific and social knowledge among the public

is essential: differences in risk assessment between population and individuals; suffering from cancer detected by examinations; judicial decisions as remedies. This will free the public in Fukushima from its stigma and help empathize with the suffering of affected individuals.

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