The 6th Citizen-Scientist International Symposium on Radiation Protection

Why have people in Fukushima felt anxiety and distrust?

NPO HSE Risk C-Cube
Tomoko Tsuchiya

H : Health
S : Safety
E : Environment

C : Community
C : Communication
C : Collaboration

My Opinions

- Failures in crisis communication are sources of anxiety and distrust of people in Fukushima
  - The reason why people have felt anxiety is lack of credible organization and less information that people want to know
  - The most important thing is to regain trust and credibility for government and scientists
- To complete mental and social well-being, government and scientists have to guarantee freedom and rights of people, especially both rights to know and to decide concerning his/her risks

- We have to really listen the public and to collaborate with them to solve many and difficult problems

Purpose of Crisis Communication

- To save people
- To help people protect themselves (to help people regain some sense of control)
- To minimize those things that confuse or disturb people's life

In the case of the Fukushima NPP accident

- Late information concerning radioactive contamination
- Insufficient examination of radiation exposure doses
- Activities imposed expert's judgements on the victims

Monitoring data of contamination were not used to protect the public

- Monitoring of radioactive contamination began on the evening of March 11, 2011. On March 15 the data showing the expansion of contamination to the north-west area was reported to MEXT
  - Max. 330μSv/h at 20km north-west of Fukushima daiichi NPP
  - MEXT informed media without supplying the information of the monitoring point
  - MEXT provided this information on its website, but did not let to know the local government having the monitoring point in their territory
  - Nuclear Safety Commission was doubtful of the data and ordered to measure the radiation level again
- This area was left as zones for sheltering indoors until April 22, when the Japanese government ordered evacuation of the public within 1 month (over 90% of residents left their home by the last third of June, 2011）

Only 1080 children surveyed

- After 2 weeks from the accident, radiation specialists examined with survey-meters 1080 children who were under 15 years old and who lived in Iidate, Kawamata, and Iwaki where heavy radioactive contamination were thought probable.
- NSC estimated there were no children whose thyroid exposure doses were over 50mSv.

- Thyroid examination began in October, 2011, for young population under 18 years old of about 380,000.
- Over 100 cases of thyroid cancer have so far been reported
- The control group consists of about 4,300 young people (excluding infants under 3 years old) living outside Fukushima pref.

"They finally showed me the result of the whole body counter saying 'There's no problem', but it was several months after the accident," complain many parents.

Failure in Risk Communication

- What they called “risk communication” to reduce anxiety about radiation was carried out
  - It mainly provided basic knowledge of radiation and explained that the risk of the radiation was low
  - It often compared the risk of radiation with that of diagnostic radiation exposure, or that of not eating enough vegetables
  - Few efforts were directed to understand victims’ anxiety and to help the public control their risk by themselves

- Experts of communication were absent from the “risk communication"
  Experts of communication
  - know it is impossible to change people’s risk perception
  - understand it is necessary to provide the information people want
  - think it important to elaborate measures with people based on their lifestyle and value

After experiencing several failures, we have tried to improve risk communication activities. But we have to start our efforts to recover trust from people.


GM 3
GM 2

Measuring radioactivity with residents

- Change of victim's mind
  Local people say :
  - Radioactive contamination was lower than I expected
  - I could confirm our perception by measuring results
  - We trust your data, while data published by national or prefectural government is doubtful
  - I wanted you to know our situation where we cannot return home
  - We want to measure the same points again, so that we can compare how the radiation levels changed
  - We want to recover our life
  - I don't want to return home yet, but I want to keep my "hope to return"

- Lessons learnt by supporters
  - The diffused "average" data make people doubtful, because they are different from their own data
  - There are many and complicated reasons for why people do not want to return to their home towns
  - It is important to acquire together "necessary" scientific data that "make sense" to the victims

Understand each other

For the future

Right to know & Right to decide by oneself concerning one's own risks

- Diversity of policies
  - People want policies supporting them not only "to return to their home town", but also "to regain their own life"
  - People worry about the situation at Fukushima daiichi NPP. But TEPCO has not provided evacuees sufficient information about what is going on in the NPP
- Care to parents
  - Explanation about thyroid examination result is insufficient, especially in such a case where nothing irregular was found in the first expamination, but something was found in the second one
  - For the parents to be able to make choices with no regret for their children, careful and scrupulous informed consent is indispensable
- Consultation to recover community
  - Present "return home" policy decided and promoted by local governments → decision by each resident
  - Community-based consultation is necessary to complement physical, mental and social well-being