A Social History of Minamata Disease
—What Do You Know about Minamata Disease?—

Takeshi Takamine

Former Editor-in-Chief,
Kumamoto Nichinichi Shimbun

Introduction

If you assume that the world you can see is the absolute totality of it, you become blind to anything else that might be there. It is important to keep in mind that you often do not realize that you have not seen something in its entirety. This is true of the question of Minamata disease as well. In this lecture, we will go back a little in time and look into the 60-year history of Minamata disease, from its official discovery to the present day and our contemporary perspective. By so doing, I would like us to contemplate why Minamata disease is still an ongoing issue today and what lessons we can draw from it. To do so, whenever possible, we will read actual newspaper articles published over the years. I will try to lead our study on the history of Minamata disease by going backward in time while adopting a present-day perspective, thereby forming an ellipse that has two focal points.

Identification of the cause: a beginning, not a goal

Minamata disease was officially discovered on May 1, 1956. In the previous month, two sisters were admitted to Chisso Corporation's hospital in Minamata City. Referring

to them and other patients with similar symptoms, Dr. Hajime Hosokawa, the director of the hospital, notified the Minamata Public Health Center on May 1 of an epidemic of a disease of unknown causes. The existence of Minamata disease was thus formally noted.

The research to elucidate the cause of this disease was mainly conducted by a research team comprising scientists from the School of Medicine, Kumamoto University. By the end of the year, the researchers concluded that the disease was not contagious and was suspected to be heavy metal poisoning via the consumption of fish and shellfish. In 1957, Dr. Hasuo Itô, the director of the Minamata Public Health Center, conducted an experiment involving feeding fish and shellfish from Minamata Bay to cats. Later, the cats presented similar symptoms to those in the patients. In 1959, the Kumamoto University Research Team identified organic mercury as the chemical causing the disease. As its source, the Minamata plant of Chisso Corporation (then Shin Nihon Chisso Hiryô Company) was suspected. In 1963, the announcement was made that concrete facts had been collected to establish that organic mercury had been released from Chisso's Minamata plant.

The above is a general timeline of the elucidation of the cause of Minamata disease. Unfortunately, however, this research virtually stopped upon the identification of the cause. There were scientists who continued to work on Minamata disease, but no organizational or structured research continued. From our present-day perspective, it seems as if the damage of Minamata disease could have been much less if a detailed investigation had been conducted to clarify many questions, such as how, and how much,

organic mercury was generated, what symptoms the victims of Minamata disease presented, how widespread its impact may be, and whether or not there were similar problems at industrial sites of the same type located all over the country. Needless to say, given the uncooperative attitude on the part of Chisso Corporation, such an investigation would not have proceeded smoothly. Yet, considering the emergence of the so-called second Minamata disease, or Niigata Minamata disease, in 1965, we can still say that the subsequent state of affairs could have been largely different if Minamata disease had been examined from the standpoint that the elucidation of the cause was the beginning of the journey to resolving the problem. This is one lesson we can draw from Minamata disease.

For another point, the Kumamoto University research team was principally composed of members of the School of Medicine. This is because the priority at that time was the elucidation of the cause of the disease. However, some believe that if measures had been taken to fully take advantage of the capabilities of a full-scale university, mobilizing the Faculties of Engineering and Science as well, the identification of organic mercury as the cause might have occurred earlier. This experience offers a precious lesson about what organizational approach should be adopted to the epidemic of an unknown disease.

Don’t ignore signs!

Minamata disease did not happen one day out of the blue.

An article in the *Kumamoto Nichinichi Shimbun* dated August 1, 1954 reports an

incident in Minamata City. The headline reads, “Epilepsy wipes out local cats, screams of panic over drastic increase in mice—Modô, Minamata City.” This article was the first in Japan to report on any event related to Minamata disease. From a broader perspective, we can also say that it was the first ever printed news in the whole world reporting a situation leading up to the discovery of Minamata disease. In those days, the *Kumamoto Nichinichi Shimbun* was a six-page newspaper, and this article occupied three columns on the third page.

The article reads as follows: *In Modô, a fishing village of about 120 households, cats suddenly began going mad in early June (the local residents call the phenomenon “cat epilepsy”). Consequently, the local feline population that used to consist of 100 or so individuals was completely wiped out, resulting in a sudden increase in mice. Local families adopted cats from outside, but those new cats also went mad and died. The local residents have requested City Hall to exterminate the mice. Since there are no rice paddies in Modô, the phenomenon is believed to be unrelated to pesticides.*

The privilege of hindsight means that we can look back on past events from our current standpoint. In hindsight, this article is actually full of indices. In Modô, a fishing village, fish lay at the heart of the local community life. Cats also ate fish. The fact that cats brought into the village from outside also died indicates that the problem lay with the village, not the cats. It was natural to rule out pesticides and other agricultural chemicals if there were no paddy fields in the village. From the present-day perspective, we see that the article carries so much vitally important information. Unfortunately, it was not used

in any useful manner back then. Two years later, in 1956, Minamata disease was officially discovered. It was learned even later that abnormal phenomena in the natural world, such as birds falling from the sky, had already been happening along the shore of the Shiranui Sea well before the appearance of this article. The emergence of symptoms typical of Minamata disease in local residents also came to be known later.

The dispute between Chisso and the fishery community over the contamination of local waters began during the Taisho Period (1912-1926). Founded in 1908, Chisso had caused problems since its early years of operation in the Taisho Period. In 1926, the local fishery cooperative received a cash settlement of 1,500 yen from Chisso on the condition that the cooperative permanently renounce lodging complaints against Chisso.

In 1952, Mr. Reiji Miyoshi, Chief of the Fisheries Division of the Kumamoto prefectural government, conducted a field survey at the request of the local parties concerned. In his report, Mr. Miyoshi wrote, “it is desirable that the wastewater be analyzed to clarify its composition, if it becomes necessary,” but his advice was never positively reflected in subsequent actions.

This was two years before the “cat epilepsy” incident in Modô. Had an in-depth investigation been conducted then, the case of Minamata disease would have developed rather differently. We can say that today our society is still paying for having repeatedly ignored signs from the natural world.

Protecting the majority at the expense of the minority

I would like to share with you another *Kumamoto Nichinichi Shimbun* article, dated November 8, 1959.

It is headlined, “Local groups appeal to Governor: stopping Minamata plant wastewater, bad for local livelihood.” The article reports how some 50 representatives of 28 Minamata City-based organizations, including the Municipal Assembly, the Chamber of Commerce and Industry, the agricultural cooperatives, and labor unions, requested Governor Hirosaku Teramoto of Kumamoto Prefecture to step in to prevent the discontinuation of operation at Chisso’s Minamata plant as it was being demanded. This was because “an immediate ban on wastewater discharge from the plant would threaten Minamata City residents’ livelihoods as a whole.” In view of the composition of the petitioners, it is obvious that all those who could be labeled as Minamata’s dignitaries, excluding the leaders of the fisheries industry, were opposed to stopping wastewater discharge from the Chisso plant, in other words, discontinuing the plant operation altogether.

Let us briefly review the situation surrounding Minamata disease at that time. In July 1959, the Kumamoto University research team announced that Minamata disease was caused by organic mercury. Chisso’s Minamata plant came under strong suspicion as the source of the contaminant. Consequently, on November 2, fishermen from the Shiranui Sea coastal area thronged to the Minamata plant, demanding a halt to wastewater discharge. A clash with the police left over 100 protesters injured. Triggered by this incident, sometimes referred to as a “fishermen’s riot” in those days, voices were raised

against violence, and at the same time local residents' feeling that the suspension of the plant's operation was problematic, something they would rather avoid, began to manifest itself clearly.

The article of November 8 points to the great presence of Chisso's plant in Minamata City: *The petitioners say that Minamata City depends on Chisso's plant for half of its total tax revenues of about 180 million yen, and if the plant discontinued its operation even temporarily, Minamata's 50,000 citizens would be affected in one way or another*.

Minamata's leaders, excluding the fisheries community, requested the governor not to order the plant to stop its wastewater discharge so that their livelihoods would not be impacted. Isn't it possible to paraphrase and summarize this attitude as one of desiring the stability of the livelihood of the majority while ignoring sacrifices suffered by the minority? It can also be described simply as a structure whereby the minority is sacrificed for the majority. How much has this structure changed in Japanese society since those days? How many people today can at least say proudly that such an era ended a long time ago in Japan? Minamata is at the far end of Kumamoto, which is far away from Tokyo. In Minamata, only Chisso was directly linked with Tokyo. In this structure, Tokyo represents the big and strong, whereas Minamata belongs to the small and weak.

It would not be totally off the mark to say that there are parallels between Minamata disease and the Fukushima Dai-ichi Nuclear Power Plant disaster following the Great East Japan Earthquake, in terms of the background to the construction of the problematic facility in the affected area and the handling of the crisis.

Some say it is wrong to use today's criteria to evaluate past events. However, we must be careful about this opinion because it often leads us to conclude, "There was nothing you could have done about it in those days." It is hard to reach the core of the issue in reflecting on a past event if we do not examine it as carefully as possible within the context of the time, while asking yourself concrete questions repeatedly as to what you would have done to be true to your principles, in order to, for example, minimize the spread of damage.

Furthermore, there are two important matters to be considered at that point in the history of Minamata disease.

Firstly, there were Minamata disease patients on the side of the residents who campaigned against the halt of wastewater discharge. That is to say, some victims were trying to silence or suppress other victims. This was a tragedy of Minamata disease.
The other point concerns information.

We must be clear about whether or not accurate information was communicated to local residents. In those days, Chisso conducted an in-house experiment, giving wastewater from the plant directly to cats, which later developed symptoms of Minamata disease. The results of this experiment were concealed within the company. If they had been disclosed to local people, who among them would have petitioned to not stop the discharge of wastewater? Isn't the importance of broadly sharing and disclosing information a lesson to be learned for a sound, civil society?

Contamination continued…

In legalese, “omission” means failing to do one’s duty. The history of Minamata disease can be described as a history of omissions. As a result, its damage expanded. What is more, omissions took place in various fields, including government, politics and medicine.

Particularly symbolic were the governmental responses.

In an investigation that followed the discovery of Minamata disease in 1956, fish and shellfish from Minamata Bay came under suspicion. Referring to the incident of food poisoning caused by littleneck clams of Lake Hamana, Shizuoka Prefecture, the Kumamoto prefectural government decided to ban fishing in Minamata Bay, and in August 1957 consulted the Ministry of Health and Welfare (present-day Ministry of Health, Labor and Welfare) on the applicability of the Food Sanitation Act to the Minamata case. The Ministry of Health and Welfare replied that the Act was not applicable because there was no clear evidence that all fish and shellfish in Minamata Bay had become toxic.

Carefully examining this response, you can see that the Ministry of Health and Welfare was asking Kumamoto to do the impossible. Following the practice in those days, to prove the toxicity of the entire marine life of Minamata Bay, it would have been necessary to catch every single fish in Minamata Bay, feed it to cats one by one, and confirm the onset of the disease in every single cat.

In 1958, Chisso modified its wastewater canal, thereby further spreading

contamination.

In November 1959, the investigation committee of the Ministry of Health and Welfare reported that Minamata disease was caused by organic mercury. In the Cabinet meeting on the following day, Hayato Ikeda, Minister for International Trade and Industry, declared that it was too hasty to conclude that the Minamata plant was the source of organic mercury. Consequently, the Minamata Food Poisoning subcommittee of the MHW investigation committee was forced to disband. Even after the announcement in 1963 that organic mercury had been detected directly in the Minamata plant, there were no political, governmental or judicial moves at all. Then, in 1965, the second Minamata disease, Niigata Minamata disease, was discovered.

With regard to the responsibility of the national and Kumamoto prefectural governments, the Supreme Court ruling in 2004 states that they should have restricted wastewater discharge from the plant by the end of 1959 at the latest but failed to do so.

No better solution that prevention

Looking back on the 60-year history of Minamata disease, we can point to the misery of environmental destruction, which is hard to undo once it has occurred.

Dr. Hasuo Itô, the director of the Minamata Public Health Center, said that in his experiment involving feeding fish and shellfish caught in Minamata Bay to cats, the earliest onset of Minamata disease occurred only after one week. This is proof of an incredibly high concentration of organic mercury. Fish and shellfish contaminated at such

a level were put on the table daily in local people's homes. This situation was left unchanged with no concrete or effective solutions. This is the way Minamata disease was treated. Moreover, congenital Minamata disease patients were also found, those who had been contaminated by organic mercury while in the mother's womb, absorbing the toxic substance via the umbilical cord. It is said that there are no statistical surveys focusing on congenital Minamata disease, but Dr. Masazumi Harada, who treated congenital Minamata disease patients for many years, once estimated their number at around 70. Thinking that such great harm has been done to such a large number, almost 100, of young lives, who were born with impairments of varying degrees that have lasted their lifetime and that there have probably been many unborn lives behind them, I am reduced to silence.

In the history of Minamata disease, there is one physician whom we cannot omit mentioning.

It is Dr. Hajime Hosokawa, the director of the Chisso-affiliated hospital in Minamata City, who first discovered Minamata disease. Secretly suspecting that the culprit of the unknown disease might be the plant of his employer, he began an experiment by feeding wastewater from the plant directly to cats. One cat began presenting symptoms of the disease. The cat later came to be known as "Cat 400." So Dr. Hosokawa was also first to identify the cause of Minamata disease. Later, in the court case that Minamata disease victims had brought against Chisso Corporation, Dr. Hosokawa, now a cancer patient himself, testified against his former employer, graphically describing the cat experiment. His testimony was decisive in cementing the verdict against Chisso. Dr. Hosokawa was

the person who discovered a disease unprecedented in the world, elucidated its cause, and finally exposed the company's wrongdoing. He left records of the cat experiment, now called "Hosokawa Notes." In these notes, you can find, among other things, these words: "Only investigating phenomena and symptoms is not enough. It's useful for post-event relief, but useless for pollution prevention measures. Regarding pollution, prevention is a far more important task than relief." You can sense in these words the sincere feelings, including regret, of a physician who continued to observe Minamata disease.

Minamata disease as a mirror

Minamata disease is multifaceted. You see a different image, depending on the angle from which you shed light on it.

Mr. Tatsuaki Okamoto, who served as the Chairman of the First Union of Chisso's Minamata Plant, commenced in 2015 the publication of a series of books titled *Minamata-byô no minshû-shi* (*A Popular History of Minamata Disease*), in six volumes published by Nihon Hyôronsha. This is a project compiling local residents' detailed testimonials of the history of Minamata Disease and reconstructing what Minamata disease has been like as an incident. The testimonials come together to reconstitute the real life of the local community and how it has evolved through key milestones: the arrival of Chisso's plant in Minamata, the release of organic mercury from the plant, the breakout of an epidemic initially called "strange disease," years of suffering for victims in the absence of any form of relief even after the cause of the disease was identified, the victims taking action while

the polluter did nothing, and monetary compensation from Chisso.

Examining Minamata disease as experienced and witnessed at the grassroots level also means that the histories of governmental administration, medicine, science and journalism vis-à-vis Minamata disease are reexamined. Indeed, Minamata disease poses deep questions on diverse subjects. Coming to appreciate this diversity and depth is also learning about Minamata disease.

Dr. Masazumi Harada, who was a physician, often used the word "mirror" with regard to Minamata disease. All his life, he asked himself what his reflection would be like in the "mirror" called Minamata disease. He passed away in June 2012 at the age of 77, leaving us many insightful words. One of them is *takara-go* (literally "treasure child").

The last full-length book about Minamata disease written by Dr. Harada is *Takara-go-tachi: Taijisei Minamata-byô ni mananda 50 nen* (*Treasure Children: Fifty Years of Learning from Patients of Congenital Minamata Disease*), published by Genshobô. In this book, the author relates the episode below involving Ms. Tomoko Kamimura, a congenital Minamata disease patient, and her family.

In Minamata Senior High School, there was a teacher who was particularly dedicated to teaching about pollution. One day, this teacher talked to his students about the importance of environmental issues. He described how the failure to protect the environment could lead to the birth of unfortunate children *like this*, pointing to the photograph *Tomoko and Mother in the Bath* by W. Eugene Smith, showing Tomoko taking a bath with her mother. In fact, Tomoko's youngest sister was in that class. She

raised her hand and spoke through tears, “That’s my elder sister in the photo. Please don’t talk about her like that.” To the teacher, these words were a tremendous shock, “like a blow to the head.” He had always actively taught about discrimination, industrial pollution and the like. After this incident, he began to ask himself whether or not he had been biased in his anti-pollution activism, automatically equating disability with misfortune.

This episode carries a deep message: there is no life unworthy of life. The Kamimura family is proof of this message through their lives. Tomoko’s mother once said the following:

> “Tomoko is our *takara-go*. While she was in my womb, she absorbed all the mercury from there. That’s why all my younger children are growing up healthy. But it’s painful that I can’t look after my other six children very much because I’m taking care of Tomoko all the time. When any of the other children fall sick, I can’t help but think that measles and common colds are really nothing compared to what Tomoko has.”

Some say that one human life is equivalent to a library. What it probably means is that one person’s life journey is as rich as a library. Tomoko’s mother’s words concisely imply what it means for one person to live her life. What is now essential for us is what we learn from there, and how we learn it.

How many people and how much?

“How many people and how much?” said one bureaucrat, during a deliberation on policy measures concerning Minamata disease. They were routine questions posed by governmental officials in those deliberations: how many people should be covered, and how much will it cost?

It seems that the 60-year history of Minamata disease has evolved around these words.

The first relief measure for Minamata disease patients was monetary compensation paid by Chisso according to an agreement signed between the company and patients at the end of 1959. The agreement also included a payment of 300,000 yen to the families of deceased patients. However, these payments did not constitute damage compensation with which Chisso admitted its responsibility. Rather, it was defined strictly as a form of “sympathy.” At that time, a council was formed for the diagnostic examination of Minamata disease patients to determine who was qualified to receive the sympathy money. Consequently, this process set in motion the Minamata disease certification system in which a committee of physicians decides, with unanimity, who among voluntary applicants can receive sympathy money. This system has since become the mainframe of damage compensation for Minamata disease.

From the beginning, the certification system has contained in it essential questions such as how to define Minamata disease and how to determine whether or not someone has Minamata disease. Eventually, the answers initially given to these questions began to prove increasingly contradictory as the damage of Minamata disease expanded. Contradictions in the system have led to administrative complaints and lawsuits.

Nevertheless, the national government, Kumamoto Prefecture and Chisso did nothing to change the system.

The verdict announced in March 1973 in the first Minamata disease trial and the compensation agreement reached in July 1973 constituted a new framework of damage compensation for Minamata disease victims. However, confrontation between the governmental side trying to minimize the scope of officially recognized damage and the victims trying to tear it down has continued.

It is possible to say that this confrontation resulted in two relief measures for uncertified Minamata disease patients, that is, the solution presented by the national government in 1995 and the Minamata Disease Special Measures Act established in 2009, as realistic compromises. However, the truly final solution to the problem is yet to come. We can say that this situation has been produced by the core mentality of those who caused Minamata disease, who cannot extricate themselves from the "how many people and how much?" way of thinking. The history of Minamata disease as examined from the angle of compensation for victims thus exposes part of the essential nature of the issue.

Keep your imagination, keep asking "why?"

Many people may associate Minamata disease with images of severely afflicted patients agonizing on the bed. To be sure, those images are part of what Minamata disease is. At the same time, there are also others who remain quiet outwardly, unable to claim the official status of Minamata disease patients. There are also those who live with lesser

difficulties in their daily lives, such as numbness in the hands, feet and tongue… The totality of all these people is what Minamata disease is.

In my opinion, Minamata disease is symbolized by the adjective “temporary.” A clear example is the reclamation of a part of Minamata Bay. It was completed in 1990 at a total cost of 48 billion yen, reclaiming an area of 58 hectares while dredging up sludge containing mercury at a concentration of 25 ppm or higher. Today, the site is used as a sports park, but the highly mercury-contaminated sludge is still there, untreated. For the time being, it is kept in a temporary, not final, disposal site. It is publicly known that there is a fault zone near this site. The question “how much?” is implicated in the handling of the site. Discussion of the patient certification system and criteria is still continuing today. Isn’t the adjective “temporary” aptly applicable here as well? It is also symbolic that the standard tolerable intake of fish and shellfish in connection with mercury concentration is called “provisional (temporary) regulation value.”

Minamata disease is often mentioned as something that happened “in the shadow of Japan’s rapid economic growth.” Is this really accurate? Shouldn’t it be the other way around in reality, that Minamata disease, as well as other forms of industrial pollution, allowed the country to realize its rapid economic growth? I believe that this also points to the significance of learning about Minamata disease today.

One aspect of modern Japan can be narrated through the Ashio Copper Mine Incident. The year 2013 marked the centennial of the death of Shôjô Tanaka, the local political leader who appealed to the national government on behalf of the victims of contamination

by the copper mine. Before the 60 years of Minamata disease, Yanaka Village had a history of over one century. Drawing a straight line connecting Ashio with Minamata, you can see the barefaced modern Japan. In a sense, this bare face can serve as our important guidepost as we move forward. Only by learning from the past can we slowly turn past tragedies into invaluable assets of our society. To do this, we need imagination. We need to keep our imagination alive and keep sharpening it, while constantly asking "why?": what has happened in Minamata and why, what is the situation today and why, and so on and so forth. I would like us to sharpen our imagination together to answer these numerous "why's".