### **Summary of the Panel Discussion**

### Disaster Medicine and the Role of Medical Associations\*1



#### **Panelists (From right to left):**

Kazuhisa OGAWA (President, Strategic Research Institute of International Change)

Tetsuya SAKAMOTO (Professor, Department of Critical Care, Teikyo University School of Medicine; Head, Trauma and Resuscitation Centre, Teikyo University Hospital)

Stephanie KAYDEN (Director, Lavine Family Humanitarian Studies Initiative, Harvard Humanitarian Initiative)

James J. JAMES (Director, the American Medical Association Center for Public Health Preparedness and Disaster Response)

José Luiz GOMES do AMARAL (President of the World Medical Association;

Past-President, the Brazilian Medical Association)

Masami ISHII (Executive Board Member, Japan Medical Association)

Michael R. REICH (Takemi Professor of International Health Policy, Harvard School of Public Health) Makoto AKASHI (Executive Director, National Institute of Radiological Sciences)

#### **Co-Chairs (Alphabetical order):**

Kunio KOBAYASHI (Professor, Faculty of Health and Medical Science, Teikyo Heisei University; Chairperson, the JMA Committee on Emergency and Disaster Medicine) Yoshitake YOKOKURA (Vice-President, Japan Medical Association)

(Titles as of March 11, 2011)

## Issue in Disaster Medicine Is How to Follow-Up After the Initial Phase

**[Kobayashi]** During the Great East Japan Disaster, the Japan Medical Association (JMA)

organized the Japan Medical Association Team (JMAT) and dispatched a large number of the medical teams, amounting to nearly 1,400, to various disaster sites. Today, we have confirmed that they achieved considerable success.

<sup>\*1</sup> This article is based on the panel discussion made at the JMA Symposium on Health Policy "Disaster Medicine and Medical Associations" held on March 11, 2012.

However, I believe it is important to consider not just the initial phase but also how to continue the relief activities afterward. The JMAT already concluded its activities, but the JMAT II is now in operation. Perhaps we should also consider our future approach toward the education and training for the doctors involved in the JMAT activities.

#### JMAT Is a Pioneering Initiative

[Amaral] The WMA has also raised this issue. Since this debate began, many countries have expressed their willingness to deliver assistance. As a result, the WMA Declaration of Montevideo on Disaster Preparedness and Medical Response was adopted in 2011. The JMA was the first country to support the draft, followed by the American Medical Association (AMA).

Many countries have various experiences to contribute. In Israel and Germany, there is an initiative to prepare teams of physicians and health professionals to face this kind of problem. In Brazil, we also developed a group of volunteers, which are now up to 900 physicians. Other national medical associations, for example, Portugal, England, and America, are also organizing systematic efforts. So, there are many initiatives in the world, however, I am not aware of an organization similar to that of the JMAT. I think the JMAT is a pioneer in this regard.

#### **DMAT Activities in the United States**

**[Kobayashi]** I would like to ask Dr. James of the AMA about the activities of the disaster medicine teams in the United States.

[James] We have the Disaster Medical Assistance Team (DMAT) in the United States. The DMAT is organized under the federal government, which was born during the Korean War. The DMAT teams are usually formed on civilian hospitals basis, such as Cleveland Clinic and the Harvard hospitals in the State of Massachusetts, and others.

In addition to that, we have many state organizations, and then within those organizations there are various configurations—some are physicians, some are dental, most of them are mixed. One of the things we strive for is to achieve integration of the education, the training, the equipment, and the operation procedures for those teams. If

those teams cannot be deployed outside of their areas, they are not really effective. If a Japanese team is going to go outside of Japan, there needs to be a method or system of integration. That is what we strive to reach, and we believe we can get there.

We need not a common educational system, but a common education built on the same competencies—so that when a Japanese team or American team or Brazilian team shows up, we can talk the same language, we can exchange ideas, and most importantly, we can work together.

# For Comprehensive Care That Meets the International Standards for Disaster Relief

**[Kobayashi]** Dr. Kayden mentioned about the international standards called the *Sphere Standards*. In light of these standards, what is your impression or evaluation of the disaster relief response of Japan this time?

**[Kayden]** I think many parts of the response in Japan were very successful. Medical communities including the JMA moved extremely quickly to go into the disaster areas. There were some rapid assessments made in some areas, which made the response in those areas much more efficient and allowed to make good use of resources.

In other areas, however, there were some challenges, particularly in the shelter situations. After Hurricane Katrina in the Unites States, we had difficulties providing services and care in the shelters. From what I have heard from other people, there seem to have been some challenges in the shelter situations in Japan, too.

However, the most important thing is that we can all be better prepared in the future by learning at training sessions and educational seminars on disaster medicine. We need to integrate the international standards into our upcoming planning, so that our response in the United States, in Japan, and in other advanced countries can be up to the international standards in the way that provides comprehensive care.

# Health Management for the People of Fukushima and the Role of the JMA After the Disaster

**[Kobayashi]** I myself visited the shelters several times, and I believe many of them were below

the standards. I would like to ask Dr. Reich to briefly describe the network of care that the JMA should be responsible from the viewpoint of our role in the post-disaster response.

[Reich] I would propose to discuss who would follow up and care for the Fukushima Prefecture evacuees who now live all over Japan. I feel that the limitation of the Japanese bureaucracy has been shown in this regard as well. In the end, government work alone cannot solve this problem. I believe the cooperation between the government as the public entity and the JMA as the civilian entity may be able to solve the problem.

[Ishii] I feel that the problem of health management for the Fukushima Prefecture is no longer the problem of Fukushima only, and that the concerns and questions that Fukushima has have spread throughout Japan. So we need to approach this issue from both sides. First, we need to establish that the Fukushima Prefecture is safe in visible manner, like building blocks one by one. Then, we need to consider as the national problem at the same level. And then, all people of Japan, including Fukushima residents who are now scattered in various places, will share the one common sense of security. But as Dr. Reich mentioned, such work cannot be done all at once. The JMA President Yokokura and I visited the area, and we came up with the idea of creating a "national center for safety and security" in Fukushima Prefecture, which will be in charge of health management of the Fukushima people in turn. The JMA has already proposed this idea to the National Government as well as the Fukushima Prefectural Government.

[Reich] The JMAT played a very important role. But if the DMAT is to deal with acute response whereas the JMAT is to address intermediary response, the question then becomes who is in charge of the long-term follow-up. This issue especially relates to the problem of stress, and as Dr. Ishii mentioned, who will care for the emotional stress and problems?

[Ishii] The government launched the Disaster Victims Health Support Liaison Council, and the JMA President Yokokura serves as the secretary general. This council consults with various professionals, including the Japanese Association of Psychiatric Hospitals, to address extremely long-term problems.

After all, we must take a comprehensive approach. I believe we should all work together

and consider as the post-JMAT phase activities. I also think it would primarily be the JMA that can lead such efforts. I believe it is an extension of the work of the JMAT II.

## Nationwide Education System on Radiation Medicine Is Needed

**[Kobayashi]** Dr. Akashi recommended any doctor in general to be well knowledgeable in radiation medicine. I am afraid that many doctors may hesitate or feel somewhat reluctant to step into the field of radiation medicine.

[Akashi] Actually, until the outbreak of this disaster, the education on radiation exposure effects due to nuclear or radiation incidents was mainly done by municipalities with nuclear power plants. In other words, those municipalities without nuclear power plants offered little education to their residents on the effect of radiation and radiation exposure medicine. We knew it before, but this accident made it clear that a disaster of this magnitude is not something that the municipality with nuclear power plants can handle alone.

A major accident took place at the Fukushima Daiichi Nuclear Power Station. But in reality, each year there are one or two cases of exposure accidents caused by radioactive source in the world. In fact, there was one in Peru this year, too. Therefore, rather than medical institutions in the municipalities with nuclear facilities studying radiation exposure medicine, physicians in general need to be educated on the basic, not the professional, level of knowledge on radiation and radiation exposure effects.

In addition, we need an educational system in which any medical staff can participate anywhere in the country. There is no such system at present, but it is included in the core curriculum of medical schools. In 4 or 5 years it will be known that radiation exposure is possible to happen. I also think training programs for industrial doctors will also address the issue of radiation in the future, so I would recommend making use of such opportunity for education. I would also strongly propose the national government offer seminars on radiation exposure for anyone and anywhere not only for the municipalities with nuclear power plants.

### Public Health Aspects Must Be More Emphasized in Disaster Medicine Education

[Sakamoto] I believe every doctor should be able to respond to a disaster, and I think it is a great idea to use the JMAT as one common keyword in disaster medicine education. But one thing we must bear in mind is that, if we consider the JMAT as acute disaster relief at disaster sites and think ordinary disaster medicine means only triage, there is a risk of overlooking what really needs to be done.

Disaster medicine education at medical schools is often taught by instructors from the acute care lab through disaster medicine courses. We, as emergency physicians, tend to focus on dramatic stories of the DMAT or triage. But what medical school students really need to learn about a disaster is what are needed at shelters and what standards need to be met. In future. from my experience, disaster medicine education should focus more on the public health aspects. [Kayden] The training that the disaster responders need to have depends on the exact activities they would be involved in. The JMAT has slightly different functions compared to the DMAT. Because the DMAT is sent immediately after the onset of a disaster, it may need more experience in the areas like triage. The JMAT is sent to provide more long-term medical care, and it needs more public health preparedness.

The JMAT needs to be trained to provide public health services together with its medical services. There are various courses, some are international ones including *Sphere Standards*, some are for other skills required for disaster response in humanitarian crisis. They typically take 2 or 3 weeks to complete.

Another very important part in humanitarian disaster response is simulation training. Just as in the triage or decontamination training, there is also simulation training for humanitarian disasters.

For example, in our Harvard course, we take our students to a local forest, and they live there for 3 days and nights and have a simulation of natural disaster with a large-scale population displacement, disease outbreak, and sometimes more complex situations. All of these training are important because it allows students to learn what it is like to be hungry, cold, tired, and sleepy,

and still have to make proper decisions for a large population. Simulation training is very important.

# Education and Training Should Be Designed From the Long-Term Perspective

[James] The AMA has been doing it for 10 years, and I have some fairly strong opinions from the result of my experiences in the United States, which I think it is pertinent here in Japan as well. Education and training has to be looked as a life-long issue. If you want all doctors, all nurses, all medical people to be potentially informed responders, we need a common core curriculum in our professional schools. This first aspect should include radiation, decontamination, and biological issues. It sounds like a lot, but in terms of giving the basic education, it is not a lot. Rather it gives them a ground work for the future.

The second aspect is the timely follow-up. When an event actually happens, we must respond in a timely manner, and that means having prepared materials, ready to go out to primary care or hospitals, etc.

The third and the extremely important aspect for the JMAT, the DMAT, and any other disaster response, is to provide increased education and training in the high-risk areas for disasters, such as earthquakes or radiation exposure.

The final one would be the issue of leadership. If you have bad or poor leadership, it is a public health risk factor. One of the speakers today mentioned a fear of making a mistake. If you do not allow your leader to make a mistake, they will not make a decision, and then you have compounded a problem. I think you saw the effect of that in Fukushima, as we certainly saw that in Katrina.

# Efforts in the United States to Incorporate Disaster Response in Medical School Curriculum

[Amaral] When the WMA started to examine the potential role of national medical associations in disaster response, we studied the examples of the JMA and the AMA. We went to the United States to understand exactly what the training programs that Dr. James talked about consist of, and we found them very interesting.

The AMA's training program is developed in different levels; for doctors, doctors and nurses, and health professionals. I felt that this concept of making everyone having a second specialty as a healthcare provider and as a citizen as well was very important. At first, I was skeptical about incorporating disaster preparedness into medical or nursing curriculum, but after going through the course for medical school students once, I became very sure of its importance.

So, my experience in the United States taught me that it is quite feasible for all medical associations. The ways that many groups and activities were organized in Japan this time also set an example for the WMA. These examples are very helpful for the WMA in showing the national medical associations that such approach is important and also feasible.

## Importance of Foreign Languages and Multi-Cultural Capabilities

[Amaral (continued)] Another point I would like to emphasize is the differences in cultures. When considering international activities or network in one country, it is necessary to classify and organize its people according to their cultural capabilities and to have contacts in every country.

When the disaster struck last year in Japan, it was very easy to contact the JMA because the JMA already had built a worldwide network. Many countries have people with multi-cultural capabilities. Having someone who can speak Japanese and understand Japanese culture can quite be helpful in such situations.

I think this multi-cultural capability is very important, and should be incorporated as cultural programs or foreign language programs so that some information about the health situation of the country can be exchanged and potential volunteers for disaster relief can be selected.

In case of Brazil, for instance, I would welcome radiation specialists very much, and I would also love to work with the JMA in the radiation emergency planning in Brazil. We have 2 nuclear power plants in Brazil, and they are situated in very dangerous and populated areas. So it would be great to have a radiation specialist to visit us there, and I am sure that we have many doctors in Brazil with cultural capability who can understand Japanese better than I do. It is just one

example, and I am sure there are many other potential, too.

### Need to Create a Risk Management System That Can Respond to All Crises

[Yokokura] I would like to invite Professor Keizo Takemi, who is specialized in international health and has a close bond with the Harvard University, on the issue of "the role of Japan in international health."

**[Takemi]** In the Great East Japan Disaster, I strongly felt the significance of medical care provided for chronic patients by many member physicians of the JMA, especially through the JMAT activities.

WMA president Dr. Amaral mentioned that "there is no safe place on this planet." Dr. James of the AMA stated that we have entered an era that forces us to anticipate not only natural disasters but also human disasters, nuclear accidents, and the threat of terrorism, and that the 21st century has turned into an era in which threats to human survival, life, and dignity have become much more diversified. Dr. Reich expressed that the Great East Japan Disaster was indeed a compounded disaster of earthquake, tsunami, and nuclear plant accident, which further intensified and complicated its impact on the politics, economy and society.

I also reconfirmed that Japan must also continue to face these extremely various threats from now on like other countries. We must develop a risk management system in Japan that can respond to all these different threats. To do so, it is essential to have political leadership with professional knowledge, requiring a multi-sectored approach that integrates many different fields of tasks.

But then, how can we unify the collaboration systems between government and private sectors, including the government-government partnership that can overcome the bureaucratic sectionalism in Japanese administration, NGOs, the JMA, and so on. For that, I believe it is evident that we need to have a law that addresses risk management issues.

In the Basic Act on Disaster Control Measures, the obligation to respond firstly lies on local municipalities, such as cities, towns, and villages. When they are unable to respond, then, the obligation goes to their prefectures and then

to the national government. I do not believe this system is in error in principle. As Dr. Kayden described, however, by sharing a sense of community based on humanitarianism that exceeds the boundaries of nations, we can now respond to various threats by collaborating with the United Nations and other countries that are above the framework of a sovereign nation. Today we reaffirmed this understanding, which I believe to be a great success.

At the national administration level, the issue of launching the nuclear regulatory agency has been raised and the Reconstruction Agency has been created, but the debate in Japan is at a standstill there. Japan needs to take a step further and develop a new law that can address risk management from such broad range of perspectives.

I realized that it is the community and its people that I need to focus on, not the sovereign state. In this 21st century, it is important to approach from the viewpoint of people's security, in which the survival, life, and dignity of each individual person are protected.

**[Yokokura]** I would like to thank all speakers for sharing your valuable insights today. This concludes the panel discussion session.