50th Anniversary of the Japan Medical Association Journal



The Japan Medical Association Journal (JMAJ) celebrates 50 years in publication this year. Initially published as the Asian Medical Journal, the JMAJ was first issued in 1956 and has since been fulfilling its mission of broadly informing other Asian countries particularly about the activities of the Japan Medical Association (JMA). The journal's title was changed to the Japan Medical Asso-

ciation Journal in 2001 and publication has continued with the purpose of informing our medical colleagues not only in Asian countries but also throughout the world including member associations of the World Medical Association (WMA) and Confederation of Medical Associations in Asia and Oceania (CMAAO).

The journal provides in detail the latest information on the international activities of the JMA, health policies, and the activities of local medical associations—information that is rarely available elsewhere. The JMAJ also publishes translations of articles on trends in specialist medical societies and medical articles originally published in the JMA's Japanese-language journal, the Journal of the JMA, introducing the latest information on medical and health care in Japan.

The JMA also acts as the Asian-Pacific regional office for the WMA and Secretariat of the CMAAO and could therefore be said to be a base for information exchange within this region. By proactively publishing information about WMA- and CMAAO-related activities, we believe the JMAJ can also contribute to the recording of the important activities of these organizations.

In September last year, the WMA and JMA co-hosted the 1st WMA Asian-Pacific Regional Conference held here in Tokyo. This conference brought together representatives of medical associations in the Asian-Pacific region to discuss two main themes: responses to natural disasters such as earthquakes and tsunami, and responses to outbreaks of infectious disease. In order to strongly emphasize the importance of thinking everyday about disasters and infectious diseases, on the same day as the WMA conference the JMA also held a public lecture on the same themes as the WMA conference for members of the general public and workers and officials in charge of rescue and disaster prevention throughout Japan. Issue 50(1) of the JMAJ is a special issue summarizing the content and outcomes of these meetings.

From 2007 the JMAJ will be published bimonthly rather than monthly and the content is to be enriched even further. It is our hope that the JMAJ will be used widely as a medium providing from the physician's perspective an overall picture of health care in Japan, which according to WHO figures, supports the highest health standards in the world.



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Asian MEDICAL Vol. 18, No. 9 September, 1975 JOURNAL -SPECIAL EDITION For The 29th World Medical / "Development and Allocation of Mer-TED BY THE JAPAN Published by JAPAN MEDICAL PUBLISHERS, INC. 2005 4

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50th Anniversary Special Edition



Chinzan-so and Four Seasons Hotel Tokyo, Japan September 10–11, 2006

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What the WMA Should Do for Global Health

From right to left: Yoshihito KARASAWA (President, JMA) Kazuo IWASA (Vice-chair, WMA Council) Masami ISHII (Executive Board Member, JMA) Kgosi LETLAPE (President, WMA) Yoram BLACHAR (Chair, WMA Council)

6F Saloon, JMA Office Building Sunday, September 10, 2006

The WMA-sponsored JMA Special Public Lecture was held in the Hall of the JMA Office Building on September 10, 2006. Dr. Kgosi Letlape, President of the World Medical Association (WMA) and Dr. Yoram Blachar, Chair of the WMA Council, who delivered opening addresses at the lecture, also participated in a discussion with the JMA leaders ahead of the 1st WMA Asian-Pacific Regional Conference which was held in Chinzan-so and the Four Seasons Hotel, Tokyo, on September 10 and 11, 2006.

Ethics and Nuclear Issues

[Dr. Iwasa] Thank you for joining this discussion today. We whould like to discuss several important issues, taking the opportunity of the hosting of the JMA and WMA meetings here.

[Dr. Letlape] When the JMA holds this kind of public lecture, what sort of range of issues are usually handled for the public?

[Dr. Karasawa] As you may know, JMA has the think tank called JMA Research Institute, and we co-host these public forums with this research institute. The main themes that we have dealt with in the past have been the long-term healthcare insurance that was established in Japan in 2000, the issues of aging population, medical errors or patient safety, and trends in medical information technology. Funding for health care is going to be the theme for the next public forum. [Dr. Letlape] Now, do you ever venture into more controversial areas, like issues of stem cell research, issues of abortion and so on? **[Dr. Blachar]** End of life would be one of the important issues to be discussed in the future. **[Dr. Letlape]** Have you ever picked up on these topics, or their bioethical implications, with the public?

[Dr. Karasawa] These issues are very important, not only for medical profession, but also for the public, but we haven't come to the point where we could actually openly discuss these matters with them. We will cover these problems in special events targeted at the general public to be held very shortly. We have a committee on bioethics, and we have been discussing these issues within the JMA for a long time, so the next step will be to have this sort of dialogue with the public. I hope that we will be able to have a kind of public forum to address these themes, as you suggest.

[Dr. Letlape] Please let me ask something just out of interest. I've just come from Helsinki today. I was invited there by the International Physicians Against Nuclear Warfare, and during the trip I was informed about the history of Hiroshima and Nagasaki, since this is the 60th





Kgosi LETLAPE



Yoram BLACHAR

Anniversary of those nuclear bombings. Is there any discussion occurring between the JMA and the general public about nuclear power and nuclear weapons? I am interested in knowing whether these kinds of issues have been discussed within the JMA. Is there any particular position that has been taken by the JMA with regards to nuclear power, nuclear warfare, etc.? [Dr. Karasawa] Thank you very much for asking this question. I see that you have actually given considerable thought to how the Japanese nation thinks and actually feels about the nuclear issue. As you may know, the Constitution of Japan clearly stipulates that we completely reject the use of nuclear weapons. And not only that, we will only allow the use of weapons and military force to defend ourselves. So we have actually abolished all military capabilities other than those for defense. The abolition of nuclear weapons is something that we have always advocated ever since the atomic bombings during the war, and we have actually tried actively to spread this message to other parts of the world. Our activities are based on the firm belief that we should not permit the use of nuclear weapons in any way. Of course, the peaceful use of nuclear energy is permissible, but not for military use or for purposes of mass destruction. We have also received very strong messages from the Hiroshima and Nagasaki medical associations. I myself happened to be in Nagasaki yesterday, and the topic actually came up in discussion with them. That is, I think, this issue is already imprinted on us as a nation, or on the Japanese mind.

[Dr. Letlape] Thank you very much.

Significance of the Activities of the WMA

[Dr. Iwasa] Thank you very much. Let us go on to the the next topic: the activities of the WMA. My first question is the most fundamental one –From your long involvement in the activities of WMA, what do you think is the core part of the WMA?

[Dr. Letlape] The significance of the WMA is that it is a collective repository of the experience of its members, and as such it should then be a repository where we learn from each others' experiences and we share our experiences so that other associations don't have to experience them as well. We could be informed by your experiences in terms of the Second World War or nuclear issues because any other NMA does not have such experiences. Regarding the sharing of experiences, the WMA has to be a body that informs global health policies, and it has to be actively involved in that. Just like the JMA leads health reform in your country, the WMA should collectively aid those discussions globally.

[Dr. Blachar] In 2004, there was a survey of national medical associations regarding the question of the aims and vision of the WMA. And in the area of globalization, it seems that wherever you go in the world and ask about healthcare systems, you find the same problems being shared by physicians and other health professionals. So, according to the survey we did with the aid of a consulting firm, it turned out that healthcare system reform was the area that NMAs are most interested in, and the second

was advocacy—representing world physicians in the organizations like the WHO and so on. Medical ethics, which is the first item on the agenda of the WMA, is still the core business of the WMA. But the problem of ethics has become less important compared to the other problems shared by physicians all over the world at present. All of these issues can be found, I think, in the WMA Strategic Plans for 2003–2007, which are very comprehensive.

[Dr. Ishii] As a member of the Strategic Planning Work Group, I took part in telephone conferences several times to discuss the details of the WMA Strategic Plans. Our discussions were incorporated into a Report of the Strategic Planning Work Group (Table 1).

Relationship of WMA with Other International Organizations

[Dr. Iwasa] Thank you very much for your



Yoshihito KARASAWA

contributions. Let me ask you about the next topic, that is, about the relationship of WMA with other international organizations in terms of alliance, or exchange of information. What kinds

	Ethics and Guidance
1. Objectives	 Maintain the WMA as the premier global source for medical ethics. Transform the WMA Ethics Unit to the "WMA Ethics Institute" Develop an Ethics Agenda for 2007–2009
2. Expected Results 2007	 Installation of the Ethics Institute as a Network of Experts and Scholars of Medical Ethics Developing new policy stimulated by NMAs Maintaining the up-date of WMA policy Restarting the discussion on the Declaration of Helsinki Stimulate policy debate in fields we are lacking policy Representation of WMA positions in international organizations and Conferences
	Service and Outreach
1. Objectives	Strengthen service to members, associates and physicians
2. Expected Results 2007	 Web portal for the WMA New/extended educational products Starting business activities More members from Africa
3. Milestones 2007 (by quarters)	 Q: Exploring sponsorship options for service materials Q: Proposing new membership types Q: Resume talks with Arabic leaders Q: Council discussion and selection/approval of new membership types Q: New language versions of the MDR-TB Course Q: Online version of the Ethics Manual Q: Finalize talks with Arabic leaders Q: Toolkit on medical safety Q: Guidance for patients on consent building

 Table 1
 Recommendations for the sets of activities to be taken in 2007 in order to implement the WMA Strategic Plan

(Excerpts from Report of the WMA Strategic Plan Workgroup, October 2006)



Kazuo IWASA

of relationships does the WMA have with other international organizations?

[Dr. Blachar] Well, during the last few years, we have strengthened our relationships with other health professionals, and there is a body called the World Health Professional Organization, which meets just before the WHO General Assembly. Although in the beginning physicians and quite a number of NMAs did not really like the idea of physicians sharing a role with pharmacists, nurses, and dentists, it turned out that by joining forces with health professionals other than physicians, we became much more visible in the WHO. We still regard ourselves as the leaders of this big group, and it has turned out to be quite a good decision to ally with all these health professionals, so we are now a stronger organization.

[Dr. Letlape] There are also other organizations that we need to create relationships with. As the Chair mentioned, one of the critical issues that arose from the survey was that we have done a lot of work with ethics, but we have not done a lot of work on access. And when doctors comment about health systems, they're basically lamenting about the increasing lack of access for their patients, and increasing lack of funding for healthcare where governments do not invest enough. Because of this, it is going to be important to maintain good working relationships with groups like the World Trade Organization, which is relevant to some issues that we are discussing now. But it all depends upon resourcing the organization so that we have enough funds to be able to interact with all these international groups. And more importantly, we must not leave the patients behind. We also need

to have good relationships with civil society groups and patient groups.

Health Reform

[Dr. Iwasa] The universal health insurance system in Japan is going well although there is a problem of financing.

[Dr. Karasawa] It was established in 1961. Let me just tell you about the current challenges relating to the health system being faced in Japan. Historically, Japan has already achieved universal coverage with its health insurance. Because it is government managed, there are many voices, and pressure coming from the government side with respect to how to use funds. Such pressures are mounting year by year. Because of increase in health costs steming from advances in medical technology and aging patients, the government is seeking to contain health costs. So the problem is how to find a solution to this question in cooperation with the citizens of Japan. It is also closely linked to changes in Japanese and global economy. So we are very concerned about the future of health care, health costs and universal insurance. I think it necessary to continue to talk to the relevant government officials and convey the JMA's basic stance toward this important problem.

[Dr. Blachar] Hearing what Dr. Karasawa said, it just strengthened my deep belief that the WMA is becoming increasingly important in this age of globalization because we meet government people and health ministers at the WHO and exchange ideas. Health reform often actually occurs in one country stimulated by this exchange of ideas, and this often urges other countries to make changes, too. So the physicians should continue to gather together and exchange ideas. One of the most important questions that was raised by Dr. Karasawa and Dr. Letlape is about the decrease in access to medical care. I suppose that this may come from the increasing costs of medical care. In other professions and other fields, whenever modernization occurs, it lowers costs. In medicine, it's the opposite. The more advancements there are, the more expensive medicine becomes. So we must discuss, amongst ourselves, how best we can protect our patients. In Israel, the Israel Medical Association has its best alliance with Israeli patients' organizations. Together they put pressure on the government to include more and more technologies and medicines in the basic medical basket of the national health insurance so that all patients can get the best treatment available. It is a constant battle.

[Dr. Karasawa] In this discussion, we have confirmed a list of the challenges we face, which actually leads me to believe that the WMA can go on to play much more important role than before, and I'm glad that we could all confirm that.

[Dr. Blachar] May I just add one thing? I'd like to thank the JMA for their all involvement in and contributions to the WMA. It really is very important for the WMA.

How to Strengthen the Activities of WMA

[Dr. Iwasa] Now, let us pick up on the very important issues to be discussed in today's public lecture and in the WMA conference. These relate to earthquakes and tsunamis, as well as disaster prevention measures. Another issue is infectious diseases. Diseases are actually borderless—in other words, they go beyond borders or economic boundaries—and because of the particular nature of such phenomena, the WMA may be able to play even a larger role in the globalized world. How are you going to revitalize your activities, such as by increasing your memberhip so that you can have a stronger financial basis for your activities? What are your plans in strengthening the WMA in terms of its activities and its membership?

[**Dr. Letlape**] Well, I will leave answering this to the Chair and Secretary-General. But in general, the challenge that the WMA faces is largely one of funding. One of the primary problems is a lack of funds, and we need to find innovative ways of ensuring that we can fund our activities. That is the first major challenge. In terms of increasing our membership, we just have to go out and recruit the NMAs that are not on the WMA's list. And during my years as president, coming from Africa, I decided that we should increase the participation of African countries in the WMA. I mean, we currently have about six that are partially active out of 52 countries in Africa. So we have arranged to hold the first African meeting two days before the WMA Assembly. Fifteen countries have agreed to meet and I'm hopeful that by the end of 2007 we'll have at least 20 African countries participating in the WMA. There are also other regions that need to be brought in. The Pacific islands and the Caribbean areas, and most importantly, Arabic



Masami ISHII

nations are conspicuously absent. So we need to make a plan and a special effort to recruit Arabic and Muslim countries. My term as President of WMA ends in a month, but my commitment to recruiting more people into the WMA will continue for as long as I am able to assist. So I think that it becomes an important aspect in terms of strengthening the WMA.

Another question is, what kind of problems should be picked up for discussion at the WMA? We need to find a way to ensure that WMA activities are relevant to the issues that affect the people of the world. We've done good work on ethics, but there are other areas becoming more important that we need to move into. And as we move into these important areas, NMAs will then come to the fore, because one of the questions that some associations ask us is, "What is the benefit of belonging to the WMA?" And that is because we are not closely aligned to the real issues that affect doctors and patients and we need to come back closer to that. We need to become an organization that creates an environment where these issues can be discussed globally, and currently this kind of forum does not exist.

[Dr. Iwasa] Thank you. What do you think about this problem, Dr. Blachar?

[Dr. Blachar] Well, one tool by which we can augment our connectivity with each other is an e-strategy for the WMA, in order to take advantage of the powerful electronic communications in order to transfer information and technology to all members of the WMA and to exchange ideas with each other. I think that this is one of the high priority targets for the WMA to create and have an e-strategy in order to increase its membership. [**Dr. Ishii**] Thank you. As a member of WMA, the JMA is willing to concert its efforts in order to implement the strategic plans for the future activities of WMA.

[Dr. Karasawa] Well, thank you very much. I think you have given me a lot of points to review. The JMA is well aware and quite fine-tuned to the domestic situation, but probably we have not had enough opportunity to study problems experienced overseas in order to share information and ideas. And coming back to the Japanese situation, even with the advancement of medical technology, we still have health care issues such as a lack of doctors in remote areas. Another

thing is the uneven distribution of the number of doctors in the various specialties. These are issues that we have to tackle in Japan. But they all seem to be the sort of underlying problems that exist in other countries as well. There is much that we can learn from your experiences from the WMA meetings. And of course we have many regional tasks to fulfill in the Asian-Pacific area, so we must also try to be very active in solving these questions, such as natural disaster and infectious diseases which are specific to the Asian-Pacific area.

[Dr. Iwasa] Thank you so much. We have had a very productive discussion today and I hope that the WMA Asian-Pacific Regional Conference will also be an informative and proactive conference.



September 10–11, 2006 Chinzan-so and Four Seasons Hotel Tokyo, Japan

Program

	Sunday, September 10, 20	006
	Open Session	
16:00–16:15	General/Welcome Session	Orion 5F, Chinzan-so
	Welcome by Dr. Yank D. COBLE, Chair of "Caring Physicia Dr. Yoshihito KARASAWA, President of JMA Dr. Kgosi LETLAPE, President of WMA	ns of the World" Initiative
	Chairs of Day session: Dr. COBLE and Dr. KARASAWA	
	Keynote Speaches	
16:15–16:50	Dr. Shigeru OMI, Regional Director, WHO Regional Office for the	e Western Pacific (WPRO)
	Topic: Current Situation of Pandemic Influenza	
16:50–17:20	Open Discussion Invited Respondents	
17:20–17:50	Dr. Jorge PUENTE, Vice President of Medical & Regulatory Affairs	for Japan & Asia, Pfizer Inc
	Topic: The State of the Profession in the World · Physicians' autonomy · Is advocacy working? · Are we a value or an expense? · How are we perceived? · What is the data on the economic val	l Today lue?
17:50–18:15	Dr. Ross BOSWELL, Vice-Chair of Council, CMAAO	
	Topic: The State of the Profession	
18:15–18:30	Dr. Otmar KLOIBER, Secretary General of WMA	
	Topic: The State of the Profession—Physicians	' Strike in Germany
	Welcome Dinner	
19:00–19:30	Reception	Garden Terrace, Chinzan-so
19:30–22:00	Buffet-Dinner	Galaxy 1F, Chinzan-so
	Remarks by Dr. Yank D. COBLE Dr. Yoshihito KARASAWA Dr. Jae Jung KIM, President of CMAAO Dr. Chiang Yin WONG, Secretary General of M Mr. Jiro KAWASAKI, Minister of Health, Labou	MASEAN ur and Welfare

	Monday, September 1 ⁻	, 2006—Morning Session
Sessions	s for the Representatives of the Nat	onal Medical Associations and Invited Guests
09:00–09:05	Welcome by Dr. Yank D. COBLE and Dr. Yoshihito KARASAWA	Orion 5F, Chinzan-so
	Session I: Disaster Preparedness a	nd Response: Earthquake & Tsunami
09:05–09:15	Chairs of Session I: Dr. Jae Jung KIM, President of (Dr. Yoram BLACHAR, Chair of C	CMAAO ouncil, WMA
	Introduction	
	Topic: Disaster Preparedness I: E	arthquake and Tsunami
09:15–09:45	Dr. Yoshinobu TSUJI, Earthquake Research Institute, U	niversity of Tokyo
	Topic: Mechanism of the Occurre	nce of Earthquakes and Tsunamis
09:45–10:15	Dr. Yasuhiro YAMAMOTO, Nippon Medical School	
	Topic: Disaster Management in th	e Acute Phase
10:15–10:45	Dr. Dong Chun SHIN, Executive Board Member of KMA	
	Topic: The Experiences from KM	A's Recent Activities
10:45-11:15	Coffee Break	
11:15–11:50	Open Discussion Invited Respondents	
	Session II: Disaster Preparedness	and Response: Infectious Disease
11:50–12:05	Chairs of Session II: Dr. Masao IINUMA, Executive Bo Dr. Ross BOSWELL, Vice-Chair	oard Member of JMA of Council, CMAAO
	Introduction	
	Topic: Disaster Preparedness II– · Scenarios—likely and u · Mechanisms and routes · The health professionals · The role of the medical · Which services can we · International networking · Prevention · Who are partners? (WP	Infectious Diseases nlikely of infections s' role associations provide? for preparedness and response RO/WHO, NGOs eg. Project Hope, MSF)
12:05-12:40	Dr. Takeshi KASAI,	storn Pacific (WPRO)
	Topic: Crisis Management for Infe —Global Situation on F	Pandemic Influenza and Its Preparedness
12:40-12:50	Open Discussion	
12:50-14:30	Lunch	Jupiter 4F, Chinzan-so

	Monday, September 11, 2006—Af	ternoon Session
	Sessions for the Representatives of the N	MAs and Invited Guests
Sessio	n II: Disaster Preparedness and Response:	Infectious Disease (Continued)
14:30–15:30	Roundtable Discussion on Disaster Preparedness with Dr. Takeshi KASAI and Dr. Yasuhiro YAMAMOTO	
15:30–15:50	Coffee Break	
	Session III: The State of the	Profession
15:50–16:00	Chairs of Session III: Dr. Chiang Yin WONG, Secretary General o Dr. Nachiappan ARUMUGAM, President-E	of MASEAN lect of WMA
	Introduction	
	Topic: The State of the Profession International cooperation Cooperation within the region Future perspectives 	
16:00–16:10	Provocation Dr. Kgosi LETLAPE, President of WMA	
	Topic: Medical Associations in the Future	
16:10–16:45	Roundtable Discussion on the State of the I	Profession
	Invited Respondents	
16:45–17:00	Closing Remarks Dr. Kazuo IWASA, Vice-President of JMA a Dr. Yank D. COBLE, Chair of CPW	nd Vice-Chair of Council, WMA
17:00–17:30	Break	
17:30–17:45	Press Conference	Orion 5F, Chinzan-so
	Conference Dinne	r
19:00–19:30	Reception	Hickory Room 4F, Four Seasons Hotel
19:30-22:00	Dinner	Gingko Room 4F, Four Seasons Hotel

Conference Overview

-Caring Physicians of the World-

1st WMA Asian-Pacific Regional Conference

Chinzan-so and Four Seasons Hotel Tokyo, Japan September 10–11, 2006

Organizers and Hosts:

- World Medical Association
- Japan Medical Association

Participants:

- World Medical Association
- Japan Medical Association
- · Various National Medical Associations from the Asian-Pacific Region

The conference is presented in partnership with the Pfizer Medical Humanities Initiative (PMHI).

Special gratitude to the International Federation of Medical Students' Associations Japan (IFMSA-Japan) for their on-site assistance.

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Welcome Remarks



Yank D. COBLE

Thank you very much, Dr. Kloiber; and thank you very much, Japan Medical Association; Dr. Karasawa, your leadership has been superb in co-hosting this meeting; and your organizing group, Dr. Ishii, Mr. Tsuruoka and his team, Mr. Naito from ISS have been so invaluable; and we would certainly be remiss if we did not thank also the Pfizer Medical Humanities Initiative, which has been an invaluable partner in this program.

It is an honor to be here on this special occasion. This is our 5th meeting, but it is the 1st Caring Physicians of the World (CPW) Regional Meeting in which all of our presidents, our Chair of the Board, and our Secretary-General —representing five continents—are here in the one meeting. We realize that this region plays an important role in the health of the world and we feel that Caring Physicians of the World is a way to bring us together in making clear to the world, to our patients and the public, the value and values of our profession.

We are of many languages and many cultures, but we have this one set of traditions that unify us as a profession throughout the world. The first of those traditions is caring. A Canadian physician philosopher, Sir William Osler pointed out that caring is the most important thing, and so do it first because a caring physician provides most hope. And our second tradition, the fundamental part of the World Medical Association, is the tradition of ethics in which we put the patient's interests first. This is so important because it creates trust. And then the third tradition, which makes us unique from other health professions is the degree to which we emphasize science as a part of our profession and mission: our commitment to the continuing advancement of science.

These traditions are very important to our patients, but they are also very important to the public, because the public also provides us with the power to be social leaders as well as medical leaders, as long as we have their hope and trust.

We have every reason to be optimistic that we can be successful in our venture for three reasons. First, we have those powerful traditions of ethics, caring and science. But secondly, because we can make every day of life useful. There's a Japanese saying that if you are not content of mind, you are poor; if you're content of mind, you have great riches. And that is what we fortunately have in our profession. And thirdly, we offer great value with this profession. It is the value to diminish diseases, despair, disability, and human suffering, and to provide relief. But we also provide great economic value. The economist has shown that by reducing disease, despair and disability, countries become richer. They will economically prosper so that an investment in health, medicine and your profession is a wise investment for government. It is not a cost, an expense, or a loss-it is something that we can forthrightly advocate on behalf of our patients and the public.

This meeting was inspired by your responses to our questions to you. The responses were that you would like more communication, more information about each other; secondly, that you wanted more choice and access for patients; and thirdly, that you wanted more autonomy, and more ability to provide the future for your profession. And so we are here today because that is our mission: to foster global understanding and to strengthen the role of physicians in improving the health and medical care of the people's of the world. We thank you very much for the opportunity to co-host this meeting with JMA and Asian-Pacific physicians, and we look forward to listening and learning much from you here today and tomorrow. Thank you.

Chair of "Caring Physicians of the World" Initiative (USA)



Yoshihito KARASAWA

Together with this regional conference, Japan Medical Association earlier today held a special lecture open to the general public which was held at our office building. Dr. Letlape and Dr. Blachar were kind enough to deliver a few words of greeting at the lecture. Thank you very much for your attendance, which greatly contributed to the success of the public lecture. I would also like to avail myself of this opportunity to thank WMA for their sponsorship of this public lecture.

This regional conference is partly subsidized also by Pfizer, and I would like to thank the company for contributing to the success of this conference.

I certainly hope this first regional conference in Asian-Pacific region will promote a tighter relationship with the WMA, a stronger solidarity of the physicians in this area, and higher health levels in the entire region. Thank you very much.

President, Japan Medical Association (Japan)

Ladies and gentlemen, good afternoon. I am President Karasawa of JMA. As we open the 1st WMA Asian-Pacific Regional Conference, I would like to say a few words.

Japan Medical Association is co-hosting this conference with the WMA. It is a great pleasure and we take pride in being able to do so. For this conference we have chosen natural disasters and preparedness and responses to them as well as pandemic infectious diseases as main themes. I believe these themes are extremely timely. Needless to say, natural disasters and infections transcend racial, religious, institutional, and national borders, and therefore two of the major issues that humankind should have the utmost cooperation in tackling with, and certainly healthcare professions have an increasingly important role to play in that regard.

Confederation of Medical Associations in Asia and Oceania (CMAAO), Medical Association of South East Asian Nations (MASEAN) and national medical associations of Asian-Pacific region have now gathered here in this regional conference to have very important discussion and exchange of information. It is our greatest pleasure to see regional network developing out of this forum.



Kgosi LETLAPE

Thank you, Otmar and Yank, for organizing this initiative; and thank you to the Japan Medical Association for hosting us.

On your brochures you have a greeting, and I guess that we'll call Version 5, and since it's available and you can read it, I'll give you an undated version, which would be Version 7, which will bear no resemblance to what you see in front of you. The first challenge that we face as physicians trying to work collectively is to come together. And the fact that there are 85 nations under the WMA shows that we have come together. Staying together is the next challenge, and the fact that we have NMAs which do not fully participate or keep appearing and disappearing emphasizes that challenge. But if we are going to be successful, we have to work together, and I think that is basically the crux of the matter. And a meeting like this makes that possible.

As we work together, we have to be positively going forward-where we work together, as opposed to fighting others together, so that we can lead in health reform. Fighting other people is not helpful; it just results in conflict, and we don't become useful to one another. The worst thing that doctors tend to do is to fight amongst ourselves, which is even worse than fighting others outside. But if we're going to be responsible social leaders, we shouldn't fight other people. We should guide and direct them to ensure that health becomes accessible. Instead of fighting with governments, we should be directing governments and showing them the right way, because this is what we've dedicated our lives to do and this is what we trained for.

But we also need to take certain responsibilities. Affordability is becoming a major issue, and as physicians we have to become part of the solution rather than part of the problem. We are largely the drivers of health cost. And its accessibility lies with ourselves as we come up with innovative ways to fund research so that the solutions can be made available, even to those who cannot afford them. And as we do that function responsibly, we become more resourceful about managing our limited resources.

If you look at physicians today and physicians 40 years ago, in most societies our reputation has gone down because of a lack of good leadership. We have not provided good leadership, and increasingly as physicians we become focused on ourselves and self-interest rather than on our patients. I hope this meeting becomes an opportunity for us to restore to this profession so that when leaders of nations of today need advice they'll come to us. When leaders need to know what to do about health, they do not impose their ideas on us; they come to us for wisdom. We're going to find, we're going to work together to get that respect back so that we can be more useful to our patients and to society. And looking at the caliber of people in here, it is something that should be achievable.

I'd like to thank Pfizer for having created this opportunity, and I'd like to thank all of you for having taken your time to come here. And it is not about what I can do, it is about what we can do together. I am here to learn, but I am also here to impart the little that I know. In the tradition of continuing medical education, we are here to learn, but more importantly, we are here to create harmony, on this planet that needs doctors more than ever before. We work across cultures, we work across boundaries. A heart attack is a heart attack in Japan; it is the same in Africa, it is no different. And the best treatment is the same worldwide. We have an opportunity to unite humanity and to heal societies, and I'm grateful to be here, and I hope we will use this opportunity for restoration of the faith in mankind. Thank you.

President, World Medical Association (South Africa)



Current Situation of Pandemic Influenza

JMAJ 50(1): 18-26, 2007



Good afternoon. I would like to express my sincere appreciation to Dr. Coble, Dr. Karasawa, and Dr. Letlape for giving me this opportunity. I feel honored and privileged to speak on this important occasion.

As you may be aware, I am currently the Regional Director of WHO for the Western Pacific Region. I spearheaded the WHO response against SARS, and am now deeply involved in the fight against avian influenza.

Since Avian Influenza is something that interests the international community, I'd like to take the opportunity to discuss this issue today. Firstly, I'd like to talk about the current situation of Avian Influenza, followed by pandemic threats and preparedness, and finally draw some conclusions from this very brief presentation.

Current Avian Influenza Situation —Diversity

I'm sure that most of you are keen to know where we stand vis-á-vis the issue of avian influenza. It is very difficult to answer that question, but if I were to use a single word to capture the current overall situation, that single word would be "diversity". Diversity in the sense that the H5 avian virus has become endemic. It occurs in many parts of the world—not just in Asia, but now in Europe, America, Latin America, and in Africa as well, so geographical diversity is the Shigeru OMI*1

first characteristic. Now can I have the next slide?

H5N1 poultry outbreaks

In 2004, the transmission of avian influenza was limited to the area in Asia that I am currently responsible for. However by 2005, it was already expanding, involving other parts of the world like Turkey and Romania. Next slide.

By 2006, transmission spread to involve not only Europe, but also some of the countries in Africa. So, diversity appeared in terms of the geographical location of this epidemic.

The case of Thailand illustrates some very interesting features of the transmission of avian inflenza. This map shows the situation of Thailand in 2004 where there were 35 instances of outbreak among poultry. Now in this map, the figures show the situation in Thailand as of 2004. In the early part of 2004, this outbreak among poultry hit by and large very industrialized, big-scale farms in Thailand. In order to address this issue, owners of these big farms adopted very aggressive control measures. As a result, the number of outbreaks decreased. As many as 30 million chickens were culled in order to contain this disease.

But toward the middle of the same year, in July, another outbreak occurred. This time around, it occurred not on big farms, but on small backyard farms. This situation continued for many months, and then in October, Prime Minister Thaksin, decided to stage what they called the

^{*1} Regional Director, WHO Western Pacific Region (WPRO), Manila, Philippines (OMIS@wpro.who.int).

"October Campaign". This was a very aggressive campaign which involved the recruitment of a large number of volunteers who were assigned to local communities to improve surveillance, help farmers reporting, etc. After this campaign, the number of outbreaks decreased dramatically. By the way, if you compare the number of chickens that they culled, 1.6 million, with the 30 million, it is quite small. This is because the number of chickens owned by big farms is very big, while the number of chickens owned by small backyard farms is very small. That's why the total number of the chickens culled here is 1.6—very small compared to the previous number.

Now, because of the October Campaign, the number of outbreaks declined. But although the number of outbreaks was rather small, there was also poultry smuggling from Thailand to here and there, so this slide actually illustrates two things. One is that if you adopt a very aggressive strategy, it is possible to control the outbreaks. This is number one lesson that we learned. The second lesson that we learned was that once the virus is imbedded in the community, it's extremely difficult to eradicate a virus from the environment altogether, because after this outbreak, a small number of outbreaks continued in Thailand in spite of this very successful campaign. Next slide, please.

The different colors indicate where the outbreaks occurred. So initially they occurred in Vietnam and Thailand, but recently the map has become so colorful, indicating many countries are affected. So this is another indication of the diversity of the countries affected. Next slide, please.

These are also countries where the human cases occurred, not just in Asia but elsewhere. Next slide.

Possible mechanisms for virus spread

The second kind of diversity concerns the possible mechanism for spreading the infection. I'm sure that many people have heard about the role that migratory birds play in transmitting the disease, but migratory birds represent only one part of the total picture. Another part is the trade of infected chicks. Although migrant birds play a role, this massive poultry move in trade is a very important factor. Now, when it comes to a country like Nigeria, our assessment is that Nigeria was affected not because of migratory birds, but because of the trade of infected chicks. That is our understanding, although there is not yet hard evidence to support that hypothesis, but that is our gut feeling, just off the record. Next slide.

Unpredictable nature of virus

The third kind of diversity concerns the nature of the virus. This virus is very unpredictable, and very unstable. Now, as you see, the avian influenza virus is composed of eight segments, and these different colors indicate segments derived from different viruses, so this shows that the virus has already changed significantly since 1996.

These are the phylogenic trees. The diversity in terms of the phylogenic trees was rather limited in the early stages of this outbreak of avian influenza among chickens. So this slide represents the early stages of the outbreak of avian influenza. Next slide.

This is a very recent strain, which is much more diverse. This illustrates that the virus is already undergoing very rapid biological changes. Next slide please.

Now, as some of you may be aware, in May and June 2005, over 6,000 migrant birds suddenly died in Qinghai Province in China. Until that time, these migrant birds had been assumed to be very resilient to the virus. Migratory birds were thought to carry the virus but not go down with the disease. So, when these migratory birds, which had been regarded as resilient, died all of a sudden, it provided more circumstantial evidence to indicate that the virus is undergoing very rapid genetic changes.

Countries with success and failure

When we had this outbreak as early as 2003, all the countries in Asia were affected, without exception. Some countries were successful in combatting it, while others were not. So this represents the last kind of diversity in terms of success or failure of countries in controlling the disease, particularly in Asia.

Now, this is a comparison of some countries – I will not mention which countries, but you may wish to guess. There are several components to the countries' responses, like political commitment, community awareness, quality of animal surveillance, the absence or presence of compensation mechanisms whereby farmers are given compensation if and when they have to cull their infected chickens in their backyards, and also animal vaccination,—not human vaccination, animal vaccination-and human surveillance.

Now, if you look at this slide, you can see that political commitment is not a decisive factor. Virtually all the countries have a very strong commitment. Nor is immunization-some countries, yes; some countries, no. So vaccination is not the answer: it's not a decisive factor. So what are the decisive factors? In our view, three things really make the difference. One is community awareness. The successful countries were very good at creating community awareness, but unsuccessful countries were not. In such countries animal surveillance is also very good, but in other countries it is not. So three ingredients-namely community awareness, animal surveillance, and also the presence of compensation mechanisms are very important factors which help to ensure success in controlling outbreaks of avian influenza.

This is the case of Vietnam, I'm not sure whether we have participants from Vietnam or not today, but I'd just like to use this slide to show that as long as the three ingredients that I just mentioned a little while ago are put in place, it is possible to control the disease, although it may not be possible to eradicate the virus from the environment altogether. This slide shows that in Vietnam in 2003, the majority of districts are still affected, and the green ones reprecent the occurrence of human cases, but due to the very intense efforts of the government of Vietnam and the efforts made by the communities themselves, they have had no cases since November last year, at least as far as human cases are concerned. Next slide.

So, averting avian flu in Vietnam: Vietnam was previously one of the most heavily affected countries, but now there are no cases, that is no human cases, and this is due to the aggressive, vigorous responses made, in other words, commitment, increased community organization, good animal surveillance, and culling, which was also accompanied by compensation. Compensation is a key word here. Next slide.

Pandemic Threats and Preparedness

This slide represents the three steps of intervention. We are here now; doing our best to avert avian influenza. Some people say that a global pandemic is inevitable, but I do not think so. There is still a window of opportunity for us to avert avian influenza. Of course, we are not naïve and we have to prepare for the worst-case-scenario. But that does not mean that a pandemic is inevitable. We are not powerless yet, but at the same time we have to be realistic enough to anticipate and prepare ourselves for this worst-case scenario.

If we fail to prevent the disease, a pandemic will occur. But based on epidemiological common sense, we know this pandemic strain will not emerge everywhere globally at the same time. A pandemic strain may emerge in one or two places, but not everywhere at the same time. That is why, if this pandemic strain occurs somewhere like in Vietnam or Indonesia, we have to contain the beginning of the pandemic with rapid response activities. Then, if this containment fails, we would end up with a so-called pandemic. There are three phases, and we are here, and certainly we would like to avoid a pandemic, but the worst case scenario is a pandemic if our response is not successful.

I would like to elaborate a little bit on the second item: rapid response and containment. Rapid response and containment comprises three steps. The first of these is the detection and reporting of early signals which indicate the beginning of the pandemic. The second is the assessment of the situation, determining whether the situation warrants very aggressive action or not. This is a very important judgment issue. If the answer is "yes", and the particular situation meets the criteria for a pandemic, then we have to adopt aggressive actions, which include quarantine, social distancing, etc.

This means that, if you would really like to contain the early signs of a pandemic, speed is essential. Speed is a very important element. However, the reality in terms of the duration between onset of the human cases of avian influenza and the date of reporting them to WHO is not ideal. If you really want to achieve containment of this threat successfully, the threshold, the window of opportunity, is rather limited. You have to report this outbreak within two weeks, so two weeks is really a Golden Standard. But in actuality, many of the cases are reported after two weeks or longer, so this exacerbates the very hard reality that we face. In other words, the quality of surveillance now is not yet at the level that we want to achieve. This is an important challenge that we face, particularly in developing countries.

So, if our efforts to contain the disease continue as they are now, we could end up with a pandemic. So what should we do if and when a pandemic occurs? There are three things. The first one is a public health approach. This public health approach is then divided into two -medical intervention and non-medical intervention. In terms of medical intervention we would certainly have to mobilize anti-viral drugs, Tamiflu and others, to provide these immediately to the affected countries, as well as vaccines and personal protection equipment. The other one is non-medical intervention. These include travel restrictions, quarantine, social distancing -meaning that we would have to, maybe, close schools and factories, etc.-then other social interventions so that at least basic social services like electric power supply and transportation will be maintained. So these are the three intervention measures that we would need to adopt it faced with a pandemic.

Many people have asked my WHO colleagues whether a pandemic is coming, or due, or overdue, or not yet coming-these are very relevant questions. The risk of pandemic is great and continues to persist due to the H5 virus which is very unstable and unpredictable. These are the key words-unpredictable and unstable. The evolution of the virus cannot be predicted. The next pandemic may also be caused by another new sub-type, not necessarily the H5 avian type that we are talking about, but some other sub-type. That is why nobody knows: it is anybody's guess. A pandemic would have a significant impact on not just health, but on the economy and society as a whole. But there is a window of opportunity to prepare and even avert this pandemic, as I have explained.

So then, where are we now in terms of the preparedness of the member states of the WHO?

Most of the countries have developed national pandemic preparedness plans, and some countries have conducted or plan to conduct what they call "table-top exercises"—so-called dry runs. There is a need for further planning, preparation of social services, investing in resources, testing of preparedness plans, and regional intervention. These are areas where we have to make further improvements.

Conclusion

Now then, for my conclusion. Some countries in Asia have been more successful than others in responding to avian influenza. Lessons should be learned from their experiences. I hope that other countries can learn lessons from Vietnam and to some degree, from Thailand as well. So I would like to emphasize that it is not just a hopeless situation. There is still that window of opportunity.

Containment of pandemic influenza is possible only if its earliest signals are detected by sensitive surveillance, and if vigorous measures are employed rapidly. So speed is essential: But at present, as I shared with you a little while ago, the quality of surveillance is not yet at the level that we want to achieve. So this is an area that the international community has to work on together, to improve the quality of surveillance, and particularly the quality of surveillance in developing countries where resources are not sufficient. Considerable progress has been made in terms of preparedness in some countries, but there remains much work to be done.

So these are my conclusions. Thank you very much for your attention, and if you have any questions I would more than happy to answer them; thank you very much.





Current Avian Influenza Situation Diversity

- ✤ The H5N1 virus has become endemic in birds in many parts of the world, especially in Asia
- Multiple possible mechanism for spread of infection
- Unstable and unpredictable nature of the virus
- * Country with success and failure































	Success		Not success	
	Country A	Country B	Country C	Country D
Political commitment	Very high	High	High	Low
Community Awareness	Very good	Very good	Good	?
Animal surveillance	good	good	Very poor	
Culling/compensation	good/ good	v.good/good	good/ poor	v.poor/ poo
Animal vaccination	Yes	No	Yes	Partial
Human surveillance	good	good	Improving	poor
Human case	Nov 2005	Nov 2005	ongoing	ongoing













The risk of a next pandemic

- The risk of a pandemic is great and continuing to persist due to the H5N1 virus
- The evolution of the threat cannot be predicted
- The next pandemic may also be caused by another unexpected new subtype virus
- A pandemic will cause significant impact on health, economic and social systems
- There is a window of opportunity to prepare for rapid response and containment, and for a worsecase scenario: a pandemic

Pandemic Preparedness Planning -Where are we?-

 Most countries have developed national pandemic preparedness plans

 Some countries have conducted or planned to conduct table-top exercises

Need further improvement

- Accelerating planning process
- Preparation for social service
- Investing in resource
- · Testing preparedness plans (e.
- · Regional & international collaboration



Conclusions

- Some countries in Asia are successful for responding to avian influenza: experience and lessons should be learned;
- Containment of a pandemic influenza is possible only if the earliest signals are detected by sensitive surveillance and vigorous measures are implemented rapidly;
- Considerable progress made in pandemic preparedness in some countries, but there remains much work to be done



The State of the Profession in the World Today

JMAJ 50(1): 27-36, 2007



Mr. Chairman, Karasawa-sensei, Dr. Blachar, distinguished audience: I want to thank you very much for the invitation and the great honor to be present here; I hope to have the opportunity to interact with some of you later. During my presentation I'm going to deal with a number of factors. One, I will be talking about the accomplishments of the medical profession: caring for patients. I will mention very briefly a Japanese survey that was done based on the perceptions of the public about the health care system, and then I will talk more extensively about a US and European-Canadian doctors' survey, and finalize my talk with some key findings and conclusions.

Accomplishments

But first, I have to feel very proud of belonging to a profession that has accomplished tremendously, and we should all be very proud of what has been done. Just in the last 30 years you can see the enormous amount of progress that has been achieved in decreasing mortality from major diseases. With the recent explosion of knowledge in biotechnology, we expect that this trend will continue. There have been additional gains in disease prevention and improvement in the quality of life which I will not elaborate, but those gains are equally important.

You can see in this slide what we have been able to accomplish. From the 1900s to about the middle of the 1960s, cardiovascular disease had Jorge PUENTE*1

been on the rise. And it is very evident what has happened. In the last 30 years there has been a significant decrease in CV disease, to the point where the mortality is now about the same as it used to be in the 1900s—but notably, a major difference is that people are now much older.

Caring for patients—The present challenge

But we have significant further challenges. As people age, we see that diseases that are more prevalent in the elderly population are beginning to become much more prevalent in general. This is true for CNS diseases, inflammatory diseases -I can put a number of those conditions here, they all seem to go in the same direction. When it comes to cancers, these two curves will seem to intersect at some point.

And when we look at Asia, we see that different countries are in different stages of this epidemiological milieu. In Indonesia, infectious diseases are still the Number 1 killer; in India, ischemic heart disease; In Korea, China and Taiwan, malignant neoplasia. And therefore, in order to be able to deal with these issues, we still need what this organization calls for—caring physicians.

And I thought I'd just speak about one of those who I know very well who exemplifies one of the problems we are encountering. This is my wife, and I apologize for the picture because it was the only one I could find with me. She is a

*1 Vice President of Medical & Regulatory Affairs for Japan & Asia, Pfizer Inc, New York, USA (candace.howell@pfizer.com).

physician who always wanted to practice medicine the way it should be practiced. Fortunately, we live in a small island near New York City, which has a predominantly elderly population. To leave the island (to a medical facility for example) would take over 35 minutes. Her practice is therefore mostly making house calls to her elderly patients, many of them are over 100 years of age. She provides most routine care with frequent follow-up, daily if necessary to prevent hospitalizations. She takes personally all phone calls, 24 hours a day, seven days a week. She doesn't accept payments from patients, just whatever the patient's coverage is.

She's very happy. Patients routinely bring her special baked goods or order presents that have a special meaning to them. The problem—she works seven days per week, averaging 10 to 14 hours a day; night calls often. And she is broke. She can barely make her insurance payments. Additionally, there's a little bit of frustration. Seventy percent of her time is spent on paperwork that will lead to no payments despite theoretically all of her patients belonging to Medicare.

So no wonder that we have problems recruiting people to perform primary care. This is from just a couple of weeks ago, in The New England Journal of Medicine, an article showing what's happened to our primary care residency positions in the United States, and as you can see, the number of positions on the upper curve and the number of positions that are actually filled by US graduates in the lower curve. There's a gap that is widening. Many primary care physicians, as the editorial in the journal indicates, are unhappy with their jobs as they face a seemingly insurmountable task, the quality of care is uneven, reimbursement is inadequate, and fewer and fewer US medical students are choosing to enter the field.

People can go into managed care, and this is again from the New England Journal of Medicine, an article showing that people who work in managed care feel significant pressure in their practice—pressure to limit referrals. Forty percent felt some level of pressure, 17% additionally felt that that pressure was severe. In total, 57% of medical practitioners felt significant pressure in that area. Significant pressure also to see more patients. Seventy-five percent of doctors felt that the system was asking them to see an unreasonable number of patients. And more troubling to me is that many people, 28% of doctors actually felt significant pressure to limit treatment information to their patients. In other words, they're being told not to let patients know all of their options.

How do we assess whether there's good heath care quality? Some people have advocated the use of surveys, of course. We do it in the United States particularly often. We tend to do everything by surveys. You want to know a good restaurant, you open a survey book and see what the public feels about that restaurant. You can get ratings. Is health care quality applicable to such a methodology? This is an article that appeared in the Wall Street Journal just a couple of days ago, and I thought that I'd talk a little bit about it because it addresses this issue.

This was a study conducted jointly by the Rand Corporation—which is a "think tank" group based in California that often works with the government—, by the University of California at Los Angeles, and by the Federal Department of Veterans Administration in the Unites States. They took a total of 236 patients, and they asked them, "How good is your medical care?" the average reply was 9 out of a scale of 10 —that's pretty good. Ninety percent—that's as good as it can possibly get. That was the patient's perception.

A team of health specialists then evaluated the medical records for the previous 13 months for the same patients and determined whether these patients were in fact getting good medical care. And this more objective evaluation was pretty lousy. It simply said that the medical care was fairly mediocre. What's more interesting is that if you look at those patients who said that their medical care was outstanding, meaning 10 out of 10, they got medical care that by experts was ranked as mediocre, and if you looked at those patients who felt that their medical care was mediocre, they also got mediocre medical care. So it didn't really matter whether patients had good medical care or no medical care at all. The objective evaluation showed that this methodology really does not work. So just because patients say that they are very happy with the doctors and the care they're receiving doesn't mean that they're getting good care as defined by medical experts.

Japanese public survey

There was a Japanese survey that was conducted,

in Japan by a company called Statistics and Research Corporation. It was conducted in 2004 and sponsored by Pfizer. Thirteen hundred and thirty-six respondents participated. When patients were asked about the quality of health care during the last 10 years, it's not surprising to see that the majority of Japanese patients actually felt very good about the system. Only 12% felt that it had declined. When they were asked, "Who contributed to improvements in quality of health care", it's very interesting also to see that Academic Institutions, General Hospitals, the JMA, and GPs were very prominent, but particularly Academic Institutions. Also, I would note that, somewhat surprising, drug manufacturers were actually very high on the list.

US and European/Canadian doctor's survey

But are patient surveys helpful? And the answer is really "no," based on what I just indicated earlier. So we really need to look at ourselves. What do we think about our ability to deliver care, and that's why in collaboration with the WMA, Pfizer has actually undertaken a number of surveys from Physicians. One was conducted in Europe for European-Canadian doctors, and that included 1,200 doctors in 12 countries; the interviews were completed in April of 2006. And more recently, we completed on July 28 a telephone survey with 300 US doctors; 154 of those general practitioners; 146 specialists. And the objectives of these surveys were essentially to provide insight into doctors' perceptions about the medical profession, their practices, and factors responsible for quality of health care, as well as the role of the professional medical associations in relation to doctors. And over the next few slides, I'm going to show you very briefly the results of that. There's a lot of information here, so I'm going to be very brief.

To look at various dimensions of perceived trends in healthcare quality, the question was, "Thinking about the last 10 years or so, would you say that the quality of health care in your community has...?" And the answers here essentially show a very positive trend, both US as well as European physicians feel that there is good improvement in the quality of health care, and that goes along with what we have seen. Technology really has helped us to make things better.

Now, regarding future satisfaction with medical practice, you can see that very few physicians, I should say only a minority, were satisfied with the perception of what their future would be in their medical practice. Twenty-eight percent of American physicians and 27% of European physicians felt this way. So that's somewhat disturbing.

Looking at the importance of health care proposals, the question was, "How would you rate the importance of each of the following health care proposals or issues to you personally, on a scale from 0 to 10, with 10 meaning it's very important to you and 0 meaning not at all?" And here, only "school-based anti-obesity campaigns to raise the awareness in children, parents, and teachers of the importance of diet and exercise for a healthy life", and a very similar question on "anti-smoking campaigns" received positive ratings from both US as well as European physicians. The US physicians were also very concerned with "reducing delays and wasting time for patients to get appointments and treatments". US physicians were also interested in improving the quality of medical records. Other issues did not seem to rank as high. US doctors seemed to be particularly interested in reducing waiting times for appointments and procedures.

When you ask physicians about agreeing with specific health care issues, the only statement that seemed to have some resonance was the one dealing with their ability to prescribe medications freely. In the other ones-and I have two more slides—you will see the responses are very low. To the question, "Will you agree strongly, agree somewhat, or disagree somewhat or strongly with each one of the following statements?" "Freedom to prescribe" was very importantthe majority felt that to be the case. To "Keeping government out" the majority felt exactly the same way. The statement "When the people can afford, if they can afford to pay medication, they should pay for part of it so that the government can provide medicine at lower cost to those with financial need"-also seemed to resonate well. And in general, many of these issues were related to the ability to provide healthcare so the responses tended to be universally ranked very highly.

When issues related to current satisfaction with the specifics of medical practice were asked, in general, none of the issues ranked very highly. And in fact we have a number of slides, all of them with very low scores. I'm not going to go over them, but in general, you can see that they have low rankings. Medical associations: — "How would you rate your overall approval of your primary medical association, on a scale of 0 to 10 with 10 meaning very effective and 0 not effective at all?" And again, not surprisingly, both US as well as European physicians ranked medical associations fairly low.

Relative importance of medical association Functions: Well, it's not surprising that most of these were ranked moderately. Somewhat higher were "the need to keep up to date with the latest medical information" and "the provision of the standards and guidelines for training in medical practice." But most of the other functions were simply of moderate importance.

Perceptions of the role of doctors in society: Here there was universal agreement on the Importance of primary care.

Summary of key findings and conclusion

So the key findings from the survey, Mr. Chairman, can be divided essentially into five groups. One, doctors want government out of their practice. Eighty-one percent expressed concern that bureaucratic interference and regulations have led to declines in the quality of health care for patients. Two, doctors want to shape health care, they just don't know how. They are dissatisfied with the lack of influence they have on the health care policy and with the extent to which doctors take an active role in shaping future health care policies. Three, doctors recognize the need to find solutions. The number one issue for doctors is to develop alternative sources of funding for health care to meet the future needs of an aging population. Four, an informed patient is a healthy patient. Five, the role of medical associationswhat's interesting is that doctors are uncertain about what role they should take when it comes to influencing government policies. However, they sense a need for a stronger voice in setting health policy, regardless of who accomplishes that.

So in conclusion, there are shortages of qualified practitioners in the West who specialize in primary care; there are frustrations with the difficulties preventing them from caring for patients to the best of their ability. What's interesting is that there are similarities of physicians concerns around the world—this really does not seem to be geographically bound. And these problems and difficulties seem to arise from issues that are completely unrelated to the needs of the patients, and that's probably why physicians are somewhat frustrated.

Principles on which the Pfizer Medical Partnership Initiative is founded

So Pfizer and the WMA Asian-Pacific Association have established what I belief is a very good collaborative effort in trying to gather more information about what physicians' perceptions are about their profession and how we can go about doing it. The reason is because there are four beliefs that Pfizer has that are shared with doctors, and those are that doctors are in the best position to determine the appropriate way to treat patients; that patient's needs should be at the center of health care; that an aging world will be better served by greater focus on wellness and prevention of illness; and finally, the unique relationship between the doctor and the patient must be preserved. It is on this common ground that the Pfizer Medical Partnership Initiative has been founded. On behalf of Pfizer, Mr. Chairman, ladies and gentlemen, I would like to thank you very much for the honor and the opportunity to be a participant in this very important initiative. Thank you.

















Frustrated: 70% of her time spent on paper despite theoretical adequate coverage. work that will lead to no paym













































Key Findings From Survey

- Doctors want government out of their practice
 81 % express concern that bureaucratic interference and regulation have led to declines in the quality of healthcare for patients.
- Doctors want to shape healthcare, they just don't know how
 Doctors are dissatisfied with the lack of influence they have on healthcare policy, and with the extent to which doctors take an active role in shaping future healthcare policies.
- Doctors recognize the need for new funding solutions
 The #1 issue for doctors is to develop alternative sources of funding for healthcare to meet the future needs of an ageing population.
- An informed patient is a healthy patient
 Physicians feel they could treat their patients more effectively if the public had more information about preventive medicine.
- The role of Medical Associations Doctors are uncertain about what role medical associations should play when it comes to influencing government policies. However, they sense a need for a stronger voice in setting health policy, regardless of who accomplishes this.

Conclusions

- Shortages of qualified practitioners in the West.
- Frustration with the difficulties preventing them from caring for patients to the best of their ability
- Similarities of Physicians' concerns are striking regardless of geography
- These difficulties arise from problems unrelated to the needs of the patients.

WMA ASIAN-PACIFIC REGIONAL CARING PHYSICIANS OF THE WORLD CONFERENCE

- Pfizer believes that <u>doctors are in the best position to determine</u> the appropriate way to treat patients: doctors agree.
- Pfizer believes that <u>patient needs should be at the centre of health care</u>: doctors agree.
- Pfizer believes that an ageing world will be better served by a greater focus on wellness and prevention of illness: doctors agree.
- Pfizer believes the unique relationship between the doctor and patient must be preserved: doctors agree.
- It is on this common ground that the Pfizer Medical Partnerships Initiative is founded.

THANK YOU
The State of the Profession

JMAJ 50(1): 37-41, 2007



Thank you very much, Dr. Coble. It's a pleasure to be here, and I'd like to thank Dr. Letlape from the World Medical Association, and Dr. Karasawa from the Japan Medical Association for making it possible.

This is my first opportunity to visit Japan and I've been hugely impressed in the day that I've been here with Tokyo, particularly with the beautiful parks I've found in Tokyo, at Ueno at Harajuku, and here at Chinzan-so.

My task is much easier than Dr. Puente's. He was asked to address you on the state of the profession in the world, whereas I am only to address you on the state of the profession in New Zealand. New Zealand, you many know, is a small country of 4 million people, a little country at the bottom of the world that many people forget. And perhaps for that reason, our country is often used as a laboratory for social reform. That has been its history, and I think you might find that some of the problems that our profession is grappling with in New Zealand today are problems that you may grapple with in your countries tomorrow.

Code of Patients' Rights 10th anniversary

I've chosen five issues to bring to your attention, and we'll go through these five in this order: Firstly the Code of Patients' Rights. This coming week is the 10th anniversary of New Zealand's Code of Patients' Rights. When it was introduced Ross BOSWELL*1

10 years ago, there were physicians in New Zealand who thought that the world had come to an end because patients' rights had been enshrined in regulations. We have by constitution, by legislation, a Health and Disability Commissioner, and the Commissioner makes information available to patients in many languages, including, you will see, Japanese.

The Commissioner 10 years ago produced a Code of Rights which has 10 items in it, and these are items that every patient in New Zealand has a right to. Now, I have called it here the Code of Patients' Rights because we're doctors and we have patients. That's not the politically correct term in New Zealand at present, and it is in fact officially the "Code of Health Consumers Rights" — an interesting concept because it's hard to see how health can be consumed.

These rights are available to every patient, and if a patient believes that he or she has suffered deprivation of any right, then that patient may make a complaint to the Office of the Health and Disability Commissioner, who serves an inquisitorial function and will look into the case, perhaps taking advice from a medical expert, a peer of the doctor involved in the case.

These rights apply, of course, not only to the patients of doctors but to the patients of other health professionals too, including professions that we may not necessarily recognize as professions. Other health carers are required to accord

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their patients these same rights.

The final right, as you'll see, is the right to complain. Patients do complain, and the Health and Disability Commissioner receives some thousands of complaints each year. Many of those are dismissed because in the Commissioners view the complaint is not justified. Some of them are upheld. The Commissioner does not have a right to punish a practitioner; the Commissioner may request that a practitioner write an apology to the patient or may, if the Commissioner believes this is necessary, prosecute a case before a disciplinary tribunal. The tribunal may then, if it believes the case is found, decree some punishment, and the punishment may be censure, it may be a fine, or it may in severe cases involve withdrawing the doctor's right to practice. That happens very rarely. I think in the view of most doctors, whilst this was seen as hugely threatening, in practice it has turned out to be a useful way for patients to feel that their injustices are being investigated, and in some cases, what they perceived to be injustices are found to have no basis.

Junior doctors' strike

The next issue is a junior doctors' strike. In New Zealand, all secondary care is provided in government hospitals at no cost to the patient, although there is a parallel private practice system available for those who choose to pay. And the hospitals are staffed in the same mould as Britain and Australia, largely with junior doctors who are in training to become specialists. The junior doctors may be members of our medical association but we are not their industrial union, and their contract is negotiated by a specific organization, the Resident Doctors' Association, which is recognized as their union.

This union is in dispute with the employers, the district health boards who administer the government hospitals about terms of the contract which are relatively complex, but in the junior doctors' view, the government is trying to claw back advantages that they have won by bargaining in previous contract negotiating rounds. Because of a breakdown in the negotiations, the junior doctors' union decreed a national strike in June, and for five days, there were no junior doctors expected in the hospitals.

For that reason, all elective work was cancelled by the hospitals for those days and for the period preceding it, and the hospitals were staffed on a 24 hour basis by senior doctors. That was an interesting experience for me; it's many years since I worked as a house surgeon. It was interesting for many of us. In fact, about 70% of the junior doctors joined the strike and about 30% did not. In fact, as far as can be determined, no patients suffered actual harm as a result of this strike, and junior doctors remained available if it were necessary to provide life-preserving services because the law requires that, although in very few cases were they called upon to help.

Senior doctors are represented by a different industrial union, also not our association, and the senior doctors were—I suppose the right word is "equivocal"—in their support of the junior strike. Some were strongly in favor, many were strongly opposed. It certainly was a polarizing experience.

The upshot is that the juniors came back after five days. Those of us who had been working on night duty were hugely relieved, and the dispute festers on, having been unresolved. It's possible there may yet be a further strike, although these has not yet been a further strike ballot. So that's a problem that we have continuing.

No-fault compensation for treatment injury

Another issue—and this is far from a problem for us—New Zealand has had for more than 30 years a no-fault accident compensation scheme. It is not necessary in New Zealand to carry insurance for personal injury by accident because insurance is compulsorily provided by a government corporation. And in association with this, the law that established it removed the right of individuals to bring lawsuit for personal injury by accident, including personal injury caused in their medical treatment.

When the law was first introduced around 30 years ago, compensation to a patient for a medical accident required that this accident be investigated and be classified either as a medical mishap—that is, an accident caused by medical care properly delivered—and the general indicator of that is that it would be a complication expected in less than 1% of cases; or alternatively, if the patient were to be compensated, then it would have to be classified as medical misadventure and some fault found on the part of a doctor, or a nurse, or some other health provider. That was inequitable since this was the only situation in our no-fault accident compensation where compensation required the finding of fault, and so from the middle of last year the law has been changed so that now all patients who suffer harm during treatment may be compensated for their treatment injury.

From the viewpoint of doctors and our association, that was a considerable advance. Much of the heat and blame has now been taken out of the system, and doctors are very willing to report when their patients suffer some complication that causes them pain or suffering, prolongation of their illness, or cost. Things like drug reactions, things like wound infections, are now compensable. They are not compensable with large amounts of money. The Accident Compensation Act provides that patients will have the cost of their care related to the accident and the cost of any ongoing care they require provided. It will compensate them if they are unable to resume work to the extent of 80% of their previous income, but it will not give them millions of dollars. From our viewpoint, that seems a fair and equitable solution. One of the effects of it is that in New Zealand malpractice insurance for doctors is very inexpensive. My malpractice insurancein fact, the malpractice insurance of all doctors in New Zealand-costs of the order of 1,000 New Zealand dollars, about 75,000 yen, each year.

Professional self-regulation

Professional self-regulation for doctors is an issue for doctors, and it's certainly as issue for us in New Zealand. We had a very good Medical Practitioners Act from 1995 which said that medicine in New Zealand was to be governed by a medical council whose constitution was given as shown. Four doctors who would be elected by the registered doctors; three doctors appointed by the Minister of Health, and three lay persons appointed by the Minister of Health. The Chair of the council was to be one of those people other than one of the elected doctors. That system worked well, and whilst we hankered for the previous days when all of the members of the medical council were elected by doctors, we had to concede that it seemed a reasonable system and did provide doctors with a reassurance that there were sitting on the council people whom they trusted. It's very important that doctors should trust the council that governs them, because it can only govern us if we are prepared to cooperate with it. We must be involved in the reporting and the investigation of fellow

practitioners if the system is to protect patients against bad practitioners.

That very good law was replaced by a much worse law in 2005. The concept was that the good features of the 1995 Medical Practitioners Act would be extended to other health practitioners. but the Health Practitioners Act of 2004, along with other changes which we did not like, allowed that all of the members of the governing council for any health practitioners-and this includes nurses, dentists, doctors, and others-were to be appointed by the Minister of Health. We made representations to the previous and the current Minister of Health, who are members of the same government administration, that we wished to have elected members. They said that we were welcome to hold elections and put forward names, and they would then make an appointment to the council. That occurred for the first time under this new act earlier this year. Elections were held; the top four polling doctors' names were put forward and the Minister chose not to appoint them. The Minister appointed three of those four and one other doctor who had been a candidate in the elections and who'd not been elected. It's obscure to us why the Minister should do this other than as a display of strength. We also have no personnel problem with the names, with the identities of the doctors appointed; in fact, I think I probably voted for the fourth doctor myself.

The problem is the problem of principle, that if we are to trust our council, then we believe we must have at least a minority of elected members on it. I know that this is a problem coming in Britain, where it is proposed that the general medical council be totally appointed by the Minister of Health; and I understand that it may be a problem in other jurisdictions. To us it's an important point of principle; it's a principle on which the doctors of Malta went on strike in 1977, in a strike that lasted more than 10 years and led to the destruction of the Maltese health system. I doubt that the doctors of New Zealand are quite as worked up as that about it, but we're doing our best to persuade them that they should be.

Government attempts to control doctors' fees

Finally—and this seems to be a universal phenomenon—government attempts to control doctors' fees. As I've said, most of New Zealand's secondary care is delivered in government hospitals, but most primary care is delivered by private general practitioners subsidized by the government. The average consultation fee for a patient to see a general practitioner is probably about 60 New Zealand dollars, which is about 4,500 yen. There is a government subsidy provided to the practitioners by way of annual capitation which allows about half of that to be paid from the capitation for most patients. It is being rolled out in tranches to cover the whole of the population, it's being rolled out in age groups and there is only a 20-year band still uncovered by this capitation.

When the capitation fee for 45 to 64 year olds was to be rolled out on the 1st of July this year, the government attempted to make as a condition of this additional funding a promise by doctors that they would apply for permission to increase their fees for all patients for all consultations, and that without approval from the government, a doctor could not increase his or her fees. We believe that that is a terrible wrong. Our experience has been that where the government has control of doctor's fees, the government will please patients by keeping the fees down, not doctors, because doctors are only a very small proportion of the voting public who put politicians in office. And yet, without financial viability, medical practice cannot survive, and the patients will suffer.

After considerable brinkmanship, the government's attempt to cap fees in July was defeated, but they are now offering additional subsidy for practices in poor areas if they will agree to capped fees, and this is something that we're afraid some practitioners in some poor areas where it is difficult to extract payment from patients may accept. It's a bad principle; we continue to oppose it; and we believe, for the good of medicine everywhere, doctors in private practice should be free to set and charge a fee that is commensurate with the service that they offer.

So there was a quick rundown of the current issues in New Zealand. Some of them may be unique to our country, but I think some of them may resonate with other countries. And if you have questions, I'll do my best to answer them. Thank you.

The State of the Medical Profession in New Zealand

Ross Boswell Chairman, NZMA



Code of Patients' Rights

- 1: the right to be treated with respect
- 2: the right to freedom from discrimination, coercion, harassment, and exploitation
- 3: the right to dignity and independence
- 4: the right to services of an appropriate standard
- 5: the right to effective communication

Code of Patients' Rights

- 6: the right to be fully informed
- 7: the right to make an informed choice and give informed consent
- 8: the right to support
- 9: rights in respect of teaching or research

10: the right to complain

Junior Doctors' Strike

- Interns and residents are employed in government hospitals (District Health Boards)
- · Contract dispute about terms of employment
- National strike of junior doctors for five days in June about 70% adherence
- · Dispute remains unresolved

Treatment Injury

- National no-fault accident compensation scheme adopted in 1971 – abolished the right to sue for personal injury
- Compensation for medical accident required classification as "medical mishap" or "medical misadventure"
- These classifications replaced in July 2005 by
 "treatment injury"

Medical Council of New Zealand

- Under 1995 law, constitution was:
 - 4 doctors elected by doctors
 - 3 doctors appointed by Minister
 - 3 lay persons appointed by Minister

Under 2004 law, all members appointed by Minister

General Practice Fees Control

Service delivered by private practitioners; average consultation fee about \$60 (¥4500)

Government subsidy: capitation allowing about about \$28 per consultation for all except 25 - 44-year-olds

Government tried to make fees approval a condition of further promised subsidy

Government now offering higher subsidy for poor areas in return for capped fees

The State of the Profession —Physicians' strike in Germany

JMAJ 50(1): 42-54, 2007



Otmar KLOIBER*1

Situation in Germany

I'm very much tempted to immediately continue with the discussion Ross has started, and think that is a very essential discussion which we have to have during the next years. It really comes down to some of the most important questions of our professional standing and professional autonomy which we have to answer and to deal with.

But now I have been asked to fill in and to substitute for Dr. Frank Ulrich Montgomery. Montgomery is the leader of the German doctors' union, and we have asked him to present to you about the situation in Germany and the development of the strike. When we asked him to do so, the strike was still going on; I can take out some of the tension by telling you that the strikes are over, but certainly you will be anxious to hear what the results are and how that developed.

Now, first of all, let me connect with what we had in the discussion before. We ourselves divide the profession in several ways. We divide ourselves into generalists and specialists; we divide ourselves into junior doctors and senior doctors; we divide ourselves into employed physicians and self-employed physicians. Dear colleagues: politicians love it, and politicians laugh about us because we take away our power ourselves. It is very important that we learn to unite and to speak with one voice. Fortunately, in my home country, and therefore I feel honored that I can stand here for Frank Ulrich Montgomery, we had a pretty good example this year that this situation of separating, dividing ourselves, can be reversed. Maybe it is necessary that the outside pressure has to be high enough so that this happens.

Why do doctors complain?

Now, what do doctors complain about now in Germany? Those are things which we have seen for a long time: we work too much, we never have been paid excessively well—at least not the physicians in hospitals. Physicians have been very much focused on their work and they have not taken care of the world around them, but in the past at least we had perspectives. There was something we could look for, there was a development in our career and there was a future.

Now, the world in the hospitals has changed very dramatically. The hospitals have shrunk in size; the beds went down, the number of hospitals went down, the lengths of stay went down. These are figures from Germany, but I'm pretty sure this is very much the same in most countries of the world, so there is no much difference, and at the same time, the number of cases went up dramatically. The workload has changed, and there is more and more frustration coming to the physicians working there. And one out of three junior doctors in Germany now decide that they

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will not pick up a position in medical care. They go to other professions, they do other things. And of course, those who remain, they cannot carry the load any more. So they are really in a difficult situation, and the stress is growing and growing. So what we have to discuss are the working conditions for physicians—the remuneration, the working time.

What we have to discuss

Concerning the working conditions, we have to talk about bureaucracy. That is something we heard already from Dr. Puente. A very important point I guess in all of our countries that we are all overburdened with bureaucratic work where we do not see any use of that work anymore. It seems to be that bureaucracy has gotten its own life and we do not see any affect of it, at least not for patient care. There is a very strong traditional hierarchy and what we need and what we want to discuss and what we want to get back for the physicians in perspectives to forward developed for their own careers.

We have to ask now about where are the perspectives for those physicians who now most likely have to live, to work their whole life in the hospital. Their chances of having own practices are diminished and are decreasing. And for those who go into private practice we also have to ask, "What is the situation in private practice?" And then we will find the situation private practice is equally getting more difficult than it was.

Now, during the last years, fortunately, the British Government compared the salaries of physicians in Europe and in the world, and what they found out is—and we were very lucky to have these statistics—is that the average physician in Germany has a very low income, so we were most grateful to the British Government having done this work for us. And of course, that was a very strong argument for dealing with our employers in Germany.

But we also wanted to discuss the working time. And what we have seen is with the doctors in Germany, they have average working hours between 70 and 80 hours per week. A lot of this is so-called "bad hours", or unpaid time, time which is not being even registered as working time. Either it is by pressure or coercion that doctors are not allowed to record their overtime. In the end, the consequence is the same—it is not being paid for. You are being paid for 38.5 hours but indeed you are working 80 hours.

But we have to discuss more than just money. It is working conditions, stress load, working time—nobody is able to work 36 hours in a row and still perform properly, and especially if you have a danger-prone job like being a surgeon or a physician in general, that certainly is not a good idea. And we have to discuss that we want to perform better, but if the circumstances are very poor, this is not possible.

How to start a campaign?

So how to start a campaign? How to express that we are dissatisfied with our conditions there? The question was pretty clear in the beginning. But if we only talk about money, nobody would listen. Why? Because if the general population looks at physicians in total, they have a pretty negative image of the physicians as a community. They think we are greedy, they believe we are all rich, they think we are arrogant, and in other words, we are just a mafia organization.

Now, if people look on "their" physicians, this reveals a completely different picture. Those findings are similar in most of the European countries: people believe in their physicians, and a strong and growing, number trusts that "their" physician cares for them and is somebody to. And nine out of 10 patients choose their hospital because of the physicians working there. So they believe very strongly in those persons who give the care. This is a very strange relationship between the perception on one side as a group and the perceptions as doctors as individuals there.

And they do not know how to describe us. They see physicians in their private practice, which are their physicians of first contact, and what they see, receive, and perceive, are the hospital consultants, the chief doctors in the hospitals. They do not see that there is a large workforce of residents, of specialists in the hospitals doing the service there for them.

So back to the question, "How to start a campaign?" We excluded that money would be the only issue that could be brought up. And it was necessary to bring the population behind our argument, behind the position. So what we did is we invented the drama of the young hospital doctor who is overworked, underpaid, highly sympathetic, and of course has no economic interests. That is an image people like and understand and one they have sympathy for and support for.

What happened later

In Germany for a long time all public employees worked under the same tariff, regardless whether you were a sanitary worker or a lawyer in public service, or a physician in public service, you were in the same framework of tariffs, which made it very difficult to find special arrangement for physicians. Now, in 2003, the German states so called "Länder", decided that they would cut the payment, and they did this single sided. They took away the Christmas bonus which came equal to a pay cut of 7%. The doctors swallowed it. They didn't strike, they just swallowed it.

In 2004, again, the states thought, well, if the cutting worked with the Christmas bonus, it may work with other cuts as well. And so they raised the working time from 38.5 hours unilaterally to 42 hours, which again is a payment decrease of about nearly 10%. Again, the doctors swallowed it.

But by that, in the background, the states, the Länder, became the strongest allies for the physician movement and for the physician union because they built up a pressure which nearly all of the physicians—actually all of the physicians —felt. They got less money, they had to work more—although if you work 80 hours anyway, the increase from 38 to 42 didn't mean very much, but the problem is, in fact they got a lower payment in the end.

Essentials for a physician strike

So the time came up where more and more of the physicians were asking, "What are we going to do about this?" And in parallel, the same happened with our self-employed doctors. Our self-employed doctors came under similar pressure, and it is the same what Ross described before, the government is starting to reduce the payment to physicians also in private practice, also in self-employment. So it was clear that something had to happen, and it started with defining clear goals of what we wanted. We wanted to have negotiations about our situation, not about the situation of the sanitary workers; not about the situation of the office clerks in the public service-we wanted to negotiate about our situation and about the situation of physicians. And we asked, of course, for pay rise in order to get the money back that had been taken away before. We wanted to have better working time regulations because physicians are

working until they're exhausted, which is not healthy for the physicians and is not healthy for the patients either.

Whatever we did, and that is a very important message, I think, we have to make very clear, whenever a strike was being planned, the union offered a contract to maintain the emergency services, and all of the hospitals where there were strikes agreed to have such a contract. That was a protection for the hospitals, but at the same time it was a protection for the union because the public opinion has to be with you, otherwise it doesn't work.

And it was important to produce pictures. During industrial action, if you are a steel worker, if you are a clerk in offices whether that is banks or public administration, you can go away from your work when you strike. You strike completely, close the office, nobody is working, and everything stops. This doesn't work in health care. In health care, we still have to take care of the patients, and at some level, there has to be a service that has to be provided. So it was important to produce other images of demonstration, of strike. In Berlin, for instance, the doctors symbolically boarded a vessel and shipped along the parliament buildings and said, "We are emigrating." So with the boats-these are the parliament buildings here, on the left and right side-and on the boats they went out and said, "We are emigrating and we're shipping away". In Hamburg, they marched away. They had the flags of the destination countries there and said we are going to those countries and we're leaving the country.

Young and old physicians were taking part in this strike. They all came together and did this. So it was important to have pictures-the picture of the boat, the picture of doctors going away. In Berlin, they showed an assistant doctor being killed by his workload. And in the end, we came up with a claim in Germany for the physicians there. And it was very extraordinary high, in the end. The argument was: "We have been taken away 7.5% for the Christmas bonus; we have been taken away 7% of income-while others got an increase in payment at the same time of 6% –. We lost another 10% for the work time which came on in addition. In the end our loss summed up to 30%." Frank Ulrich Montgomery said, "Well, we want to have back what we have been taken away during the last years. We want

to have back the 30%."

Interestingly, you have to know negotiations right now are about 3%, 4%, but not 30%. This was outrageous. This was something completely out of the mind, and in the first moment, the employers thought this was a joke. They didn't believe it. They thought this is completely unreal. Interesting is, the public supported the physicians. When the public was asked after the question, "Should physicians get 30% more salary?" 85% of the people said, "Yes." And again, the employers were shocked, because they believed that everybody in the public, you know, and all the people getting 2%, getting 3%, if they are lucky getting 4%, they would say, "No, no, physicians have to get the same." No, they said, "Yes, we understand. They have to get more money because they have been cheated in the last years, and that is a realistic claim they make."

Chronology

So in the development of this strike, in summer 2005, the new tariff, the bad tariff, was developed; in September 15, the doctors decided that they no longer would go into negotiations as a junior partner with other profession. The doctors decided to go on strike. And then we have two different lines. Because the university physicians, they are employed by the Länder, the states, while the other physicians, most of the others, are employed by the municipal hospitals or the private hospitals. Both now have different tariff groups, so there were two lines of negotiations. And in October 2005, the negotiations started with the Länder, with the states, the state governments, and in February already we had warning strikes. So locally doctors would stop to work and send this out as a warning message to the employers that we are prepared to strike for the rights and for better payment.

In March the negotiations for the university doctors finally failed. At the same time they started to have negotiations with the municipalities. So the municipalities and the doctors in the municipal and some of the private hospitals started a little bit later with the negotiations. First came the university hospitals. And already on March 9th, the negotiations failed, and on March 15th, 89% of the doctors in the university hospitals had voted to go on strike. Eighty-nine percent nearly all of the doctors. So there was a very clear situation. A situation which five years ago we thought never, ever would be possible. But then, in spring of this year, it became possible.

So the strikes started, and they started all over the nation. In Germany, we have about 146,000 hospital physicians, and at the peak time, 70,000 were completely out of service there. As I said before, always there were contracts in place to keep the emergency, the necessary services running. There was no place where there was no service provided. Sometimes hospital directors decided that they would close down the hospital, but that was not because there was no longer economical to run the hospital and to keep it open with a reduced service, but at no time physicians left their patients alone. This did not happen.

On March 19th something peculiar happened: The employers, the states, made a specific contract for doctors—that was what the physicians union had asked for. But they made it with the other union, where no physicians were organized in that union. And of course, that made the physicians furious. I mean, the colleagues got crazy about this. This was an insult which really turned out in the end to be a very big mistake for both the public employers, the states, as well at that other union, because everybody now believed that they are traitors. And certainly that was one of the strongest incentives for the physicians to go on with the strikes.

Now, remember, being a physician you cannot strike like an industrial worker. That is not possible. So what is important is to keep the attraction of the public, of the press, on you. So it was very important that we had very unique, very special strike actions. For instance, in Leipzig, in East Germany. In Germany nobody strikes at midnight, I mean you have it during the day when people see you on the street. But the physicians did something completely different, they went on strike on midnight. And of course, then people saw "Yes, physicians are there at midnight. They are working in the hospitals at midnight, and therefore they can strike at midnight." And of course, every TV camera in the country was there to record this. So it made the news.

In Bavaria, physicians drowned themselves symbolically in the River Isar. This was more a demonstration, than a strike, but the press was there. All the cameras were running.

In August, they had a "summit" strike. They went up on the highest mountain in Germany, the "Zugspitze", and they placed their banners up there. And of course, the press would be there. It was only three doctors who went up there, but the press came there to capture this "strike". So it is very important that you can transport images to keep this movement alive and to stay in favor of the population. This was in May. During the summer still 76% of the population said, and this is a representative quote, said, "Yes, the strike of the physicians is correct. The physicians have a right to ask for better payment, for improvement of their working conditions."

So, on June 16th, finally the states agree to have for the first time in Germany a physicianspecific contract. What they offered was 16 to 18% better payment. That is a lot. I told you, normally what we get during these times is something like 2, 3, 4%. But—and that is more important—they agreed that from now on, all working time of physicians has to be recorded electronically, and that means all working time has to be paid for. And that is a tremendous increase. We're not talking about 16%. For some of the colleagues, we're talking about 100%. So this was a huge gain that they won, and I think that is a real step forward, aside from the historical change that for the first time there is a physician contract.

However the municipalities thought that they can avoid such a development. They said, "Well, we are not going to pay you more; we pay you less. We don't have money any more." And the negotiations failed on June 9th. Few days later on June 16th there was an agreement for the university physicians. On June 24th, 97% of the physicians in the municipal hospitals decided that they would now go on strike as well. So they went on strike the same way as the university physicians did. It took nearly, nine weeks until the municipal employers agreed on a contract, which was finally agreed on August 17th. It is not as good as the one for the university doctors, the payment increase is lower, but the two important points are the same: For the first time there is a specific contract for physician, and second, all working time has to be recorded in the future.

Where are we now?

So where are we now? We have about 146,000 doctors working in hospitals in Germany. The union grew rapidly. It is very strong now. During the first weeks in strike it jumped up from 80,000 to 89,000, and now it is close to 110,000, so that is about a representation of 75%, which is a lot in Germany because we don't have a closed shop principle. And the unity among physicians is stronger than ever. The strikes have been supported by the self-employed doctors. The self-employed doctors made protest actions as well. I'm pretty sure now in fall, when the self-employed doctors will start strike actions, the hospital doctors will support them as well.

Conclusion

Money alone is no vector for public sympathy; there has to be more. You have to show that there is more than money attached to your protest. You have to show that there are specific situations for physicians,: We alsways work—we can strike at midnight. We are forced to leave the country in order to make a living. All those points people have to understand, because it is necessary to have the public behind you, and it is necessary to have the media behind you—which was very unusual because the media in Germany is extremely hostile to doctors. During this strike, the press was neutral to positive. A new situation for us, but it certainly was a very helpful one.

And of course, you have to have the colleagues behind you. If you want to achieve something, you cannot divide, you must not stratify doctors, you cannot separate between employed and self-employed, junior doctors and senior doctors, specialists and non-specialists. If you want to make a point with politicians, if you want to make a point with employers, you have to speak with one voice. Anything else is detrimental.

And finally, it can be done. Frank Ulrich Montgomery who was supposed to present this development himself is running for the presidency of the local chamber in Hamburg. In his name I thank you for your attention.



































































Chronology II

- University physicians
- 2005 October: Negotiations with Länder start
- = 2006
- March 8, 2006: First negotiations with the representatives of the municipalities

Other hospital doctors

2006

- March 9: Negotiations with Länder fail
- . March 15: 98,4 % of the
- University physicians vote for strike
- May 19: Länder try to by-pass physicians' union









Other hospital doctors

June 9, 2006: End of negotiations

- May 19: Länder try to by-pass physicians' union
- June 16: Agreement with Länder on physicians in universities
- * Physician specific contract
- Payment increase
 Mandatory recording of working hours

June 24: 97,1 % in favor of strike





Where are we now?

- The union has been a fast breeder of solidarity...
 - Membership increased by almost 25% (from 80.000 to 98.000) in 6 weeks
 - * Now close to 110.000
 - * Unity among physicians higher then ever

Conclusion

- Money alone is no vector for public sympathy
- You have to have the public behind you • You have to have the media behind you
- You have to have your colleagues behind you.....
- It can be done!



Mechanism of the Occurrence of Earthquakes and Tsunamis

JMAJ 50(1): 55-71, 2007



Yoshinobu TSUJI*1

Thank you, Mr. Chairman. Good morning, everybody.

Two years ago, at the end of 2004, a great earthquake with a magnitude of 9.0 happened near the south tip of Sumatra Island, Indonesia. Due to this earthquake, a great tsunami happened, and in total, nearly 250,000 people were killed. This is the biggest tsunami event in our history.

Today I will give a lecture on the mechanisms of the generation of earthquakes and tsunamis, and then we will consider how to survive from these natural disasters. The first slide please.

Mechanism of earthquakes and tsunamis

This figure shows a view of the 1896 Great Sanriku Earthquake Tsunami in the northern part of Honshu Island, Japan. You can see that once the tsunami happened, all peacefully living coastal people would have been killed by the covering sea water. As a result of this event, in total 22,000 people were killed due to the tsunami only, not the earthquake. Next slide please.

The earth's surface is covered with about 25 plates. These so-called plates are like conveyer belts. One plate is generated somewhere and sinks down like a belt conveyer below the neighboring plate. Here are the Japanese Islands, and here is the American coast, and the Pacific Plate is moving westward—9-cm pike here. And here the plate is sinking down because the plate

boundaries have pushed into each other and accumulated stress, and once in 100 years on average a great earthquake will happen. Next slide please.

This is the configuration of the earth's surface. You see here the Pacific Rim—the Japanese Islands, Taiwan, the Philippines, Indonesia, Papua New Guinea, and New Zealand-and the South American Continent are the plate boundaries. And here the Pacific Plate is running westward, 9 cm per year, and sinking down below the Japanese Islands, Taiwan, the Philippines, and the Indonesian Archipelago. Once every 100 years or several hundred years, a great earthquake has happened near this rim area. Remember that the medical doctors have come here today from Pacific Rim countries. All our countries, all your countries, could possibly be attacked by a huge tsunami. This is because all the countries of the Pacific Rim are very close to the plate boundaries, and over 80% of tsunamis happen around the Pacific Rim. Next slide please.

This is a schematic drawing of plate motion. The plate was generated here and the magma flow is coming from deep within the earth and is like a belt conveyer sinking down at the Pacific Rim Archipelago. Here is the plate boundary, and stress is accumulated here; and finally, dislocation will happen on the surface of this boundary. That is the mechanism of gigantic plate bound-

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ary tsunamis, gigantic tsunamis. Next slide please.

This figure shows the distribution of earthquakes of magnitudes exceeding 6.0 in the 20th century up to now. As we can see, the black mark shows earthquakes generated at the plate boundary. We see here the Japanese Islands, Taiwan, the Philippines, Indonesia and Papua New Guinea-these countries facing the Pacific coast in particular have experienced a series of earthquakes. Another group of earthquakes happened on the south coast of the Indonesian Archipelago. This is another plate boundary where the Indian/Australia plate moves from south to north at a speed of 5 cm per year and sinks down below Sunda Island in the Indonesian Archipelago, and here another group of earthquakes occurred. Next slide please.

If a plate is sinking down underneath the neighboring plate, the stress will be accumulated, and finally the plate boundaries will shift. For example, once every 100 years, suddenly the upper plate will be pushed up and the sea bottom will suddenly move upward, then the sea water becomes disturbed, and a wave will be generated. Next slide please.

Once the plate boundaries have shifted-for example, 5m or 9m-then the sea bottom will be pushed up by 2 or 3 m at a depth of 4,000 to 6,000 m in the deep sea and a wave will be generated and it will begin to approach the coast line. At the coast, on the continental shelf, water depth is only 200 m. Here the depth is 4,000 m and here it is only 200m. The energy of the wave is contained within 4,000 m of thickness; and then it will be condensed to only 200 m of water thickness. Therefore, the energy will be condensed and the amplitude of the wave will be amplified at the coast. Consequently, even if the wave height of the tsunami is only 2m in the deep sea, it will be amplified three or four times at the coast, and here, say 6 or 8m of water, a rising wave, will appear at the coast and the coastal town will be submerged by sea water. Next slide please.

There is one example of the Philippines Archipelago, with Fiji on the plate boundary, and here a group of earthquakes happened in this century, up here, in the sea west of Mindanao Island; and near the Philippines there is a plate boundary around here that crosses to the East China Sea, and here another group of earthquakes happened. And here there is a sunken trench and the plate boundary. On this back side another group of earthquakes happened. We call this group of earthquakes "backed-up earthquakes", but their frequency is not as frequent as this kind of earthquake, say a ratio of four-to-one. Next please.

To the north of Papua New Guinea, the Pacific Plate moves down from the north, and here a group of earthquakes happened, and here—the Irian Jaya area of Indonesia—is very unstable, and several times huge earthquakes have happened, and these have been accompanied by tsunami attacks on this coast. Here the plate boundary is very close to the coast, and once an earthquake has happened, a tsunami attacks this coast very rapidly. For example, a tsunami will attack this coast within ten minutes or so—only 10 minutes or so. Next slide please.

Past earthquakes and tsunamis in Indonesia

Next we'll look at the size of earthquake/tsunamis in Indonesia. Around Indonesia, not the Philippine sea plate but the Indian/Australian plate is sinking down at the Sunda Bench, and the great earthquake of 2004 took place here, and the most recent event, in 2005, took place here, and on July 17th of 2006—this year—another earthquake happened here in the central part of Java Island, here, off Chillachapel Port, and a tsunami was generated and around 500 people were killed due to the tsunami. In 1994, a serious group of earthquakes, gigantic earthquakes, took place at the plate boundary and the trench is here. Another exceptional case was in 1992, the Flores Island event, which was a backed-up event here.

In the Indonesian case, the epicentral area of the earthquakes was a distance from the mainland of Java Island or Sunda Island, of course, and there was enough time after the earthquake in this case, the East Java event of 1994. A tsunami attacked the coast 14 minutes or 15 minutes after the earthquake. In 2006, the tsunami struck after 15 minutes, and in the Sunda event, it struck nearly one hour after the earthquake—enough time for people to escape to a higher place. But in backed-up earthquake types, such as the 1992 Flores event, the epicentral area is very close to the coast, and once it has happened, the tsunami attacks the coast in only two minutes or three minutes.

Now, the meteorological agency of Indonesia has made efforts to establish a system for the issuance of tsunami warnings. Therefore, in the near future they will be able to successfully broadcast tsunami warnings through television programs to the people as the earthquake happens and the objective information about a tsunami attack will be successfully broadcast. But for backed-up event, the warning may not reach people in time. Next slide please.

2004 Sumatra earthquake (Banda Aceh)

Here we see the 2004 Sumatra earthquake event. The simultaneous damage to places in Banda Aceh city at the north point of Sumatra Island. OK. Next slide please.

Banda Aceh city is here at the north point of Sumatra Island. Next slide please.

Banda Aceh city: the population is 25,000 people, and about 60,000 people were killed in that tsunami. On the western coast of the northern most point of Sumatra Island, we conducted a survey three weeks after the earthquake/tsunami. Next slide please.

The epicenter of the earthquake was concentrated here. Within two days, aftershocks took place up to here. This shows that the epicentral area was from 3 north latitude to 13 north latitude, and therefore in a distant area. The size of the epicentral area was 1,200 km north-south. Next please.

This is a city map of Banda Aceh. The sea water came to the blue line, about 4 km from the coastline; and between the shoreline and this red line almost all buildings were swept away. Between this red line and the blue line, the buildings were not swept away, only inundated. Next please.

We took photographs three weeks after the event. You can see that no house was left due to the strong current of the tsunami. The ground was seriously eroded. Next please.

This is a mosque at the court of Banda Aceh; only this building remained mostly intact, but all other buildings were entirely destroyed or swept away. And next please.

This is a photograph taken from the second floor of the mosque. In the first wave, the sea water rose up to the yellow line. The height of this level is 12m above mean sea level; this green line is the level of the second wave. The sea water rose up to this level—this is 8.5m about mean sea level. Next please.

The walls were entirely swept away. Next please. This is a reinforced concrete building. You can see the columns of this building were reinforced steel. Not a weak building, but a strong building, but even this strong building was broken at the root of this column. Next please.

This is a high school, Banda Aceh Fifth Middle High School. You can see that before the tsunami, the second floor of the building was here, but due to the tsunami, this part—the second floor of a concrete building—was carried away. The sea water was up to 56 m above the ceiling of the second floor, 8.8 m above mean sea level. Next please.

We measured the tsunami height at the court -12.2 m. Under the innermost area, the height was about 5 m. Next.

We checked the distribution of washed-away houses by using satellite images taken before and after the tsunami, and along this street—the main street—the port, and the central most pier, and each of the three areas had a length of 1 km, 3 km in total. Next please.

This is the first area, the second area, and the third area. The white marks show the washed away houses, and the black ones are houses not washed away and kept safe. We can see that up to 2 km from the coast, almost all the houses disappeared, and then in some places, suddenly all the houses were safe. Suddenly. Here, almost all the houses were washed away, and here almost all the houses were safe. Very clearly it's a boundary. Next.

We conducted a survey on the western coast, and here in the central part of Banda Aceh city, and here on the western coast. These images show before the tsunami and after the tsunami. We can see the eroded area due to the tsunami clearly in these images. You can see a yellow, chocolate colored line which means that before the tsunami it was a green forest approaching the coast, but after the tsunami, all the trees disappeared. We checked this coast. Next please.

This is a village where all the houses were swept away. As a result, almost all the people were killed. Mortality, the percentage of persons killed by the tsunami, was nearly one 100%. Nobody survived. Next please.

The tsunami height is thought to have been more than 20m and up to 30m on this coast. In the central part of the city, not only at one point, but here at many places you can see the 30m mark. Next please.

As some plates come together here, sea water

rose up to 34.9 m here -29.8 m. We checked this. Next please.

This is a photograph of sea water that rose up to 30.4 m. Here a village had existed, and the people—about 350 people—were killed. Nobody survived. Next please.

The camera was set at 30.5 m, the inundation limit. We see here seawater. Seawater rose up to here, for 1.5 km-very unpredictable, but a reality. Next please.

Seawater also rose up here, the tsunami height was 27.9 m above mean sea level. Here there had existed one village that disappeared and nobody survived, and here you'll see a human, and then the tsunami came. No way to survive. Next.

Past earthquakes and tsunamis in Japan

Near the Japanese Islands, four plates gather. From the east the Pacific plate comes together with the Philippines plate, moving from south to north 2.5 m per year and sinking down below the western part of the Japanese Islands. One group of earthquakes happened here and another group happened here. Next please.

One group of earthquakes happened on the south of Hokkaido, another on the east coast of the northern part of Honshu Island, another on the Sanriku Coast, and another group happened here—the Tokai earthquake and the Nankai earthquake. Next.

For the Tokai area, here, and the Nankai area, here, and in this area, at an average of 100 year intervals, gigantic Tokai earthquakes and Nankai earthquakes have taken place here. The size covered by these earthquakes was 300 km; 400 km. Next please.

These lines show earthquakes in the 20th century, 19th century, 17th century, and before, and the tsunami damage is shown historically. You can see there is a trend whereby once one earthquake happened in the Tokai area, then Nankai earthquakes followed after short intervals. For example, two years after the Tokai Earthquake of 1944, the Showa Nankai Earthquake of 1946 took place; and the day after the Ansei Tokai Earthquake of 1854, only 32 hours later, the Ansei Nankai earthquake of 1854 took place in this region. The Hoei Earthquake of 1707 took place together with a huge earthquake in the Bosei area. Next please.

This red mark shows a time elapse for 2000, 150,000 A.D. and the earthquake magnitude. This

red mark shows Tokai and Nankai earthquakesfor example, the 1944 and 1946 Nankai Earthquakes, the Ansei Tokai Earthquake and Ansei Nankai Earthquake of 1854, the Hoei Earthquake 1707-occurred in intervals of about 100 years. In an earthquake in the Kinki area-Kyoto or Osaka-another group of middle-sized earthquakes took place. This gigantic earthquake correlates with the middle-size earthquakes. For example, 40 years before, the first top runner of this earthquake happened; their number grows, and then a gigantic earthquake, the Nankai earthquake, took place. Ten years after the last runner finished, a calm period with no earthquakes begins. Forty years before the top runner comes, and then the Nankai earthquake comes, and then 10 years after it the last runner comes, and then a no-earthquake period of nearly 50 years comes. Therefore inland earthquakes, middle-sized earthquakes, and Nankai earthquakes correlate with each other. The Hanshin-Awaji earthquakes in 1995 and 2001 happened around this area. We consider that these may have been the top runner for the next event. Forty years after the top runner appears, the next Nankai earthquake will happen. Therefore, the next Nankai earthquake will be 40 years after this one, maybe in 2035, 2030around 2038-, the next Nankai earthquake will occur. Next please.

Here we see the Hoei earthquake of 1707, the Ansei of 1854, and the Showa Nankai of 1946. The sizes of these three earthquakes are not the same. For example, this is Shikoku Island, Osaka and Kyoto and the south coast of the Japanese Islands. This graph shows the tsunami height. This cross indicates the event of 1946, the Showa Nankai tsunami; this black one is the Ansei Nankai tsunami of 1854; and the white one is the Hoei tsunami of 1707. We can clearly see that the Showa Nankai Earthquake tsunami was smaller-at most, 6 m. For the Ansei Nankai tsumani of 1854, the maximum tsunami height was 9m. But for the Hoei Earthquake, the tsunami was 21 m or 24 m Comparing the Showa Nankai, Ansei Nankai, and Hoei, the tsunamis were not the same size and the Hoei event was the biggest event, and the Showa Nankai was the smallest event. Next please.

Here we consider that, if Tokai earthquake and Nankai earthquake happened independently like the Showa Nankai and Ansei Nankai, the size of the Tokai Earthquake would be 300 km and the size of the Nankai Earthquake would be 400 km. But the size of the Hoei Earthquake, which happened in both areas, was 700 km. The Hoei Earthquake is comparable to the 2004 Sumatra Earthquake. The size of the Sumatra earthquake was 1,200 km, so if the Tokai Earthquake and Nankai Earthquake happened independently, they would be too small to compare. But the Hoei Earthquake of 1707 is comparable to the Sumatra event. For the Hoei Earthquake, the tsunami height exceeded 20 m and the same scene would have occurred on the coast of Kochi on the south coast of Shikoku Island. Next please.

Every big earthquake event in this area happened every time at the top of Cape Muroto; the south coast of Shikoku Island is uplifted and a sea terrace appears. For the Showa Nankai Earthquake, the amount of uplifting was 19 cm. At Muroto Cape, on average the plate is sinking down 9cm per year. After 100 years have passed, 19cm will have be compensated foreven if the Showa Nankai Earthquake uplifted 19 cm, over the next 100 years 70 cm will be cancelled out, and so no terrace remains. For the Ansei Earthquake also, even if 1.3 m was uplifted, after 100 years, 70 cm will be cancelled out and no sea terrace will remain. But in the gigantic Hoei Earthquake, 2.5 m was uplifted, and even if over the next 100 years 70 cm is compensated, 1.2 m remain and the sea terrace will remain. Next please.

This is a marine terrace at Cape Muroto, at the southern tip of Shikoku Island. One professor from Hiroshima University, Dr. Maemoku, reported observing six sea terraces using carbon dating methods. Carbon dating showed that the ledge of the terrace was formed here; the age was estimated and it was found that the lowest ledge was formed about 300 years ago. The second one was formed about 800 years ago, the third one was formed nearly 1,200 years ago, and the fourth one was formed 2,000 years ago. The last one was apparently formed 300 years ago. Naturally, we can assume that this sea terrace was formed by the 1707 Hoei Earthquake, and therefore a big earthquake, like the Hoei Earthquake, was generated three times in every 2,000 years. Nankai Earthquake occurred every 100 years, but three times every 2,000 years a gigantic earthquake, like the Sumatra event, took place. Next please.

Study of paleo-tsunamis

I will shortly show you traces of lagoon bed layers, pre-historical tsunamis. Next please.

Here, near the Kii Peninsular, a lagoon is separated from the open ocean. Only at the time of a tsunami will outside sea water with sand rush into this lagoon. We checked the lagoon bed using geological methods—collecting piston coring. Next please.

We call the equipment pulling up the piston coring the "Ninja". Next please.

We found a total of nine layers. These are the first three: the upper three are historical events, but the lower seven are pre-historical, paleo events resulting from Tokai Earthquake tsunamis. The lowest one is about 250 years ago. This mark shows that Tokai events or Nankai events happened periodically on this coast. Next please.

The earthquake and tsunami size were correlated to each other. Around the Japanese Island area, if the magnitude does not exceed 6.3, there is no tsunami. If the magnitude of the earthquake exceeds 7.5, then a huge tsunami may be generated. Next please.

Issuance of tsunami warnings

The Japan Meteorological Agency has a seismograph network for the issuance of tsunami warnings. In total, the network has about 200 points. They send meteorological observations to Tokyo or other branches in real time. Next please.

They can make judgements using P-S time and the seismic record amplitude. They can identify if there will be a tsunami, a big tsunami, or no tsunami. Within two minutes after the observance of an earthquake, they have the ability to announcement a tsunami warning. Tsunami; big tsunami; or no tsunami—such information will be broadcast via television within two-three minutes. Next please.

Fast tsunami detection

Other towns or coastal towns have tsunami sensors, like ultra-sonic ones that have been set up in the past several years. Next please.

Here the ultra-sonic sensors are trained on the sea surface, on sea water, and when the first initial wave comes to the coast, they'll detect that the first tsunami has come. That is their judgment, we think. Next please.

Such information is transmitted through tele-

communications via the Internet or land lines to fire stations and announced to the people. Next.

For example, in Kesennuma City, they installed an ultra-sonic sensor at the bay mouth and inside the bay. Next please.

They successfully announced the event of 1996, where this small climb occurred. At the bay mouth they caught the first tsunami wave event at 23 o'clock, 40 minutes before midnight, and 15 minutes later the tsunami attacked the inland most point of the central city. The firemen announced that the tsunami would be coming 10 minutes later. They were able to warn the city people. Next please.

Such an ultrasonic tsunami protection network was installed on the Sanriku Coast around here, and we recommend to the establishment of this kind of ultrasonic tsunami network, for example, on the coasts of other countries on the Pacific Rim. I also want to advise countries and regions to exchange information about the first tsunami arriving through the Internet. Exchange information. Next please.

Here we have city planning; this building is

near Fujisawa city, about 50 km south of Tokyo. It has been designated by the local government as a tsunami escape building. In the event of a tsunami warning or a tsunami coming, citizens can freely go up to the top floor of this building. Next please.

This is a sea wall against tsunamis. This is one example on the Sanriku Coast, and the height of this wall is 10m above mean sea level. They call this the "Great Wall of China". Next.

Lock gate system. Next.

This is an example on a Hawaian Island, Hilo. The people are prohibited from constructing houses close to the coast, within 1 km from the coast, so that they can have enough time to escape from a tsunami.

That's all. Thank you very much. Tsunamis and earthquakes are common natural hazards that hit people in Pacific Rim countries. We want to join together with seismologists and other disaster protection experts and medical doctors to escape from this kind of natural hazard. Thank you very much.

Mechanism of the Occurrence of Earthquakes and Tsunamis

> Dr. Yoshinobu Tsuji Earthquake Research Institute University of Tokyo



View of the 1896 Great Sanriku Tsunami



Plate Configuration on the Earth's Surface











2. Past Tsunamis in Indonesia and Japan

2.1	Indonesia		topics:the 2004 Sumatra Tsunami		
2.2	Japan	topic	es:the Nankai Gigantic Earthquakes		



The 2004 Sumatra Earthquake Report of Tsunami damage in **Banda Aceh City,** Sumatra Island Indonesia

Yoshinobu TSUJI Earthquake Research Institute, University of Tokyo









































2.2 Tsunamis in Japan

Nankai Gigantic Earthquakes



















潟湖の湖底堆積層中の先史時 代の津波痕跡の検出







4. The Method of Issuance of Tsunami Warning by Japan Meteorological Agency

日本気象庁による津波警報の発令方法































Disaster Management in the Acute Phase

JMAJ 50(1): 72-79, 2007



Today I would like to talk about disaster medical management just after the impact of the disaster, especially in the acute phase or sub-acute phase.

Complicated factors of disasters

These are the kinds of factors that cause complications in disasters these days (Slide 1). Even in the case of natural disasters, we often complain that disasters are very complicated or compounded nowadays. We have three keywords for these complications of disasters: social complications, international development, and information deluge. The first is the social complications. People's lifestyles are completely changing year by year and chronic and/or mental diseases are increasing very rapidly. This is a reflection of environmental changes, such as pollution and many other different issues. And this is the reason why natural disasters nowadays are becoming more frequent or wider ranging. Another international development,-of course, is that manmade disasters are increasing right now; for example, NBC (Nuclear, Biomedical and Chemical weapons) terror and complex emergencies. Also in another way, emerging or reemerging infectious diseases are causing great anxiety globally, not only VHF (Viral Hemorrhagic Fever) but also other infectious diseases which doctors will be discussing this afternoon.

Yasuhiro YAMAMOTO*1

Great Hanshin-Awaji Earthquake

After the Great Hanshin Earthquake, the Japanese Government informed Japanese people that such disasters must be managed by the government from the perspective of protecting the public; and citizens from the perspective of strengthening autonomy (Slide 2). These are very important things for citizens. "Disclosure and sharing of high-quality disaster information" is also important nowadays—information is getting more and more delayed-but high-quality information and the sharing of it for the benefit of Japanese people or people around the globe are very important. The "need for support-oriented communities" and "medical support is the highest basic requisite in the order of citizens' priorities" are also important. After the Hanshin Earthquake, medical support was the greatest basic requisite for people in the affected area.

These are pictures of the Great Hanshin Earthquake which occurred on January 17, 1995 (Slide 3).

In the Great Hanshin Earthquake, the weaknesses of medical care in Japan were revealed because before the Great Hanshin Earthquake, that area, the Kansai region, had been regarded as relatively safe from earthquakes (Slide 4). As a result, medical institutions in and around the Kansai area were not adequately prepared for a disaster due to an earthquake because that

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area is mostly in a zone that is frequently hit by typhoons, so they are better prepared for typhoons than for earthquakes. The Great Hanshin Earthquake occurred in an urban area with a population of more than one million people. This is also the reason why such great damage was caused. Following this earthquake, Japan's medical systems for dealing with disaster underwent dramatic change.

This is the damage caused by the earthquake -6,500 people were killed and 40,000 were injured, and 100,000 homes were totally destroyed (Slide 5).

This was taken on the day that the earthquake struck (Slide 6). Interruption of water supplies was 73%; interruption of telephone lines was 60%; interruption of gas supply was approximately 50%; and there was a lack of manpower. These kinds of deficiencies were damaging also to medical functions, of course, as well as to medical facilities. So approximately 60% to 70% of those kinds of lifelines were destroyed on the day of the earthquake (Slide 7).

This is the hospital itself (Slide 8). And this is the first-aid and rescue in the disaster area immediately following the disaster (Slide 9). On the first day, fire occurred in 58 locations. However, in the 10 days after the earthquake, 176 fires occurred in Kobe city, approximately three times more than on the first day of the earthquake, because after restoring electricity and gas, the number of fires increased very rapidly. Not only that, the fire engines had difficulty reaching the fire sites.

Medical aid activities

This slide describes the medical aid activities that occurred, especially in the evacuation shelters (Slide 10). The maximum number of evacuees in shelters was approximately 310,000 people. Medical care providers were mainly the Japan Medical Association, local medical associations, other medical associations of specialists in acute medicine or disaster medicine, and so on.

This was a very popular evacuation shelter in Kobe city (Slide 11). Approximately 300,000 people were evacuated to this type of shelter.

Fortunately in this winter season, only influenza occurred in Kobe city or in the shelters. However, previously, big earthquakes in a global setting have been followed by outbreaks of malaria, tuberculosis, salmonella, typhus, cholera, dysentery, tetanus, malaria—such as in the case of the Sumatra earthquake.—These kinds of infectious outbreaks were outbreaks of major diseases following on directly from the occurrence of earthquakes (Slide 12).

This slide shows the changes in the living environments of disaster victims (Slide 13). First, they experience extreme stress and changes in food intake. And then there is discord or reserve in communal living. The sanitary conditions deteriorate, there are privacy issues, and also toilet issues. Those kinds of problems arise from the beginning, and people in the affected area suffer very great stress.

After the Hanshin Earthquake, Japan was hit by another large earthquake, the Niigata-Chuetsu Earthquake, two years ago. At that time, people who lived in the area did not want to evacuate to the shelters and a lot of private vehicles were actually used as shelters. This resulted in cases of so-called "economy class syndrome", pulmonary thromboembolism, that occurred in people who slept in small vehicles (Slide 14).

Medical aid activities within the evacuation shelter were carried out by one team, or one unit, comprising one doctor, two nurses, and one coordinator (Slide 15). Usually, the teams were doubled, and tripled at times, so at one shelter there were three doctors, six nurses, and three medical coordinators. This team would act as one unit to watch over the evacuation shelter together, so this is the reason that there were three shifts: eight hours under one team, then another eight hours with another team, and then another eight hours with the third team. So it was a very good aid team system.

New actions taken after the Hanshin Earthquake

After the Hanshin Earthquake, the Japanese Government announced nine new actions (Slide 16). These relate to information systems. Disaster base hospitals have already been increased to approximately 400 in Japan. Disaster medicinerelated education and training for not only medical students but also young doctors or medical persons are to be implemented and spread. These nine actions, however, are still in progress.

I am quite proud of this information system (Slide 17). Before the Hanshin Earthquake, Japanese ministries were all independent, so it was relatively diffcult for them to provide and share information with each other. However, since the Hanshin Earthquake, within 30 minutes of a big disaster occurring the heads of the government ministries and agencies meet in an emergency room at the Prime Minister's residence and consolidate information, and only then one unified announcement is released to the public. This is the so-called Japanese Alert System. Nowadays, only one uniform announcement is released to the public.

Rescue efforts

This shows the time course and needs in disaster situations (Slide 18). These are on a per second and per minute basis. The time course and needs in disaster situations in a global setting would be the same: "Think about self-rescue"; "Think about family and community members". And on a daily basis, we need to think about "emergency medical care", because each second, each minute, each hour, nobody will come and help our neighbors, so neighbors must help neighbors and family members save families—this is the keyword which we have to educate people about.

This is an example that Prof. Kawada and his associates at Kyoto University reported after the Hanshin Earthquake in which 150 people were asked how and when they escaped from their houses (Slide 19). Self-rescue comprised about 79%: they escaped by themselves. And 21% had difficulty in escaping.

Of this 21%, 35,000, or 77%, were rescued by family or neighbors—neighbors helped neigbors; neighbors rescued neighbors—and only 23% were rescued by public rescue teams (Slide 20). The reason for this is that at the initial time of the onset or impact of the earthquake, on a second or minute basis, neighbors helped neighbors and families helped families. This is very important, and we were able to obtain this information after the Great Hanshin Earthquake.

Three Ts

We usually say there are three Ts at the site of disasters (Slide 21). The first is triage; the second is treatment; and the third is transportation. These three components are very necessary. In this country, there is now not only the usual triage track, but also the START triage which has already started. This START triage—which stands for Simple Triage And Rapid Treatment— is very simple. The DMAT (Disaster Medicine

Assistance Team) and CSM (Confined Space Medicine) have also already been started because before the Hanshin earthquake, medical treatment was started at the rescue center or the hospital because doctors never went to the confined area of the disaster site. But in the United States or European countries, already there is onsite amputation, onsite surgery. Medical treatment has to start from the confined space at the site of the disaster. Transportation includes not only ambulance services but also helicopters, buses, ships, and other different methods have to be considered.

Disaster medicine cycle

Here we have a diagram of the disaster medicine cycle (Slide 22). We call the first week the acute phase, which is the rescue and emergency medical care phase; and the sub-acute phase is the following two to three weeks. This is the infection phase, and PTSD. And the chronic phase is the rehabilitation phase; the reconstruction and recovery phase. And now in the Kanto area we are in what we call the silent phase, and in this silent phase we have to organize prevention and preparedness, which involves planning, training, and stockpiling. And then there is the disaster impact. This is the cycle.

After the impact of the disaster, approximately 80% of the surgery or surgical procedures are carried out within the first one week, and then there is internal medicine, and then psychiatry —including all that is covered by this area (Slide 23). Nowadays this is the usual pattern, but from the beginning, stress disorders will occur, so psychiatrists or psychological specialists have to treat people from the beginning, a need which we are now considering.

So in the acute phase, within the first week, we focus on surgery and compensation for the damage to the local medical facilities (Slide 24). This is the reason why we have to send medical teams to the site to help local medical facilities. Then two to three weeks after the impact, the incidence of internal medicine needs and infectious diseases will increase. And in the chronic phase we will have to consider PTSD and rehabilitation and support for the mental care of the disaster-affected children.

Summary

In summary then, a disaster itself is an unantici-

pated and sudden occurrence that exceeds local capacities (Slide 25). This results in an imbalance between supply and demand, which we have to prepare for, but we need to "prepare for the worst" — preparations must be made with a worst-case scenario in mind. This is what I wanted to propose on the occasion of the World Medical Associ-

ation's regional conference. We have to cooperate in medical relief in disaster-prone countries such as those on the Asian-Pacific Rim. This is the reason why we are very happy to have educational training for young medical doctors and nurses and we're very happy to work together with you.





(Slide 2) Disaster Medical Management Perspectives Government from the perspective of protecting the public; citizens from the perspective of strengthening autonomy Disclosure and sharing of high-quality disaster information Need for support-orientated communities Medical support is the highest basic requisite in the order of citizens' priorities

(Slide 4)

Revealing the Weakness of Medical Care in Japan

Prior to the Great Hanshin-Awaji Earthquake, the Kansai region had been regarded as relatively safe from major earthquakes. As a result, medical institutions in and around the Kansai area were not adequately prepared for disaster when the earthquake struck.

The Great Hanshin-Awaji Earthquake occurred in an urban area with a population of more than one million people and a high concentration of medical institutions. Despite their large number, medical institutions struggled to cope with the disaster. Following this earthquake, Japan's medical system for dealing with disasters underwent dramatic change.

(Slide 6)

(Slide 5)

Human Damage Inflicted by the Great Hanshin-Awaji Earthquake

At 5:45 am on January 17, 1995, a major earthquake with a magnitude of 7.3 struck southern Hyogo Prefecture.

Human Damage

6,433 people
3 people
10,683 people
33,109 people
104,906 homes



(Slide 8)

(Slide 7) Factors in the Decreased Medical Functioning of Hospitals on the Day of the Earthquake Water/wastewater supply interruption: 73% Telephone line interruption/congestion: 60.1% Gas supply interruption: 50.4% Lack of manpower (staff in hospitals at time of earthquake)

Hospitals: Doctors 58%, nurses 44.2% Clinics: Doctors 65.5%, nurses 39.3%

(Slide 9)

First-aid and Rescue in the Disaster Area

Immediately following the earthquake, fires occurred simultaneously in 58 locations throughout Kobe city.

Fire hydrants could not be used; fire-fighting operations were made extremely difficult by the collapse of buildings and dreadful road conditions including abandoned vehicles and sunken roads.

Number of fires in Kobe City in the 10 days after the earthquake: 176 (= the number of earthquakes in Kobe city in 2 months under ordinary conditions)



(Slide 10)

Activities of Medical Aid Centers within Evacuation Shelters

 Number of evacuees within Hyogo Prefecture: 316,678 people in 1,153 evacuation centers (maximum number was on January 23)

Medical Care Providers

 Medical associations within the disaster area
 Medical associations outside the disaster area, Kinki Medical Association Liaison Committee, Japan Medical Association, prefectural medical associations throughout Japan, the Japanese Association for Acute Medicine, JMTDR, etc.

DISASTER MANAGEMENT IN THE ACUTE PHASE

(Slide 12)

(Slide 11)



Outbreaks of Infectious Disease Following Major Earthquakes

Year	Disaster Area	Disaster	Infectious Disease(s)
1907	San Francisco (C.A.U.S.)	Fire	Black plague
1918	Duluth (M.S.U.S.)	Forest fire	Influenza
1963	Haiti	Hurricane	Malaria, tuberculosis
1976	Friuli (Italy)	Earthquake	Salmonella
1979	Dominica	Hurricane	Typhus, pneumonia, measles
1982	Ecuador	Flood	Malaria, cholera
1983	Popayan (Columbia)	Earthquake	Pneumonia, tuberculosis
1995	Hanshin/Awaji (Japan)	Earthquake	Influenza
2004	Sumatra/Indian Ocean	Earthquake/tsunami	Malaria, tetanus

(Slide 13) Changes in Living Environment of Disaster Victims Following a Disaster · Changes in Victims Themselves Extreme disaster stress

- · Decrease/change in food intake
- Discord or reserve in communal living
- Changes in Living Environment
 - · Deterioration of sanitary conditions
 - · Disruption of privacy
 - · Live as evacuees
 - Destruction of privacy
 - Problem of toilet inconvenience

(Slide 15)

Activities of Medical Aid Centers within Evacuation Shelters

Composition of Medical Aid Teams

Doctors:	1
Nurses:	2-3
Medical coordinator:	1

Medical aid teams were assembled based on the standard composition shown above. In addition to manning emergency aid centers and first-aid stations around the clock, medical teams also visited evacuation shelters.



(Slide 16) New Action Born As a Result of the Great Hanshin-Awaji Earthquake Encouragement of participation by medical professionals in regional disaster-prevention meetings assaster-prevention meetings 2. Conclusion of agreements regarding support in a disaster 3. Improvement of wide-area disaster and emergency medical information systems 4. Establishment of Disaster Base Hospitals

- 5. Strengthening of health center functioning related to disaster medicine Implementation and spread of disaster medicine-related education and training
 Compilation of hospital disaster prevention manuals, use of guidelines
- Coordination of fire-fighting services in times of disaster
 Improvement of system for searching for bodies in times of disaster
- ("Research Team Regarding Manuals for Action in the Acute Phase of a Disaster and their Implementation", edited by Yasuhiro Yamamoto)

(Slide 18)

Disaster Responses that Advanced the Most in the Wake of the Great Hanshin-Awaji Earthquake

(Slide 17)

How fast can decisions be made and government action determined based on accurate information?

- 1. Prime Minister's Residence Emergency Team Within 30 minutes of a disaster occurring, the heads of all government ministries and agencies meet in an emergency room beneath the Prime Minister's residence to determine what action the government will take, and the consolidated information is released.
- 2. J-Alert System Alerts are sent to all prefectures based on the Law to Protect the People.















(Slide 25) Summary • Unanticipated situation • Sudden occurrence • Local coping capacity exceeded • Emergency situation resulting from multiple casualties • Imbalance between demand and supply; aid from outside disaster area necessary • Impossible to meet all demands with even the best aid • Preparations must be made with a worst-case scenario in mind

The Experiences from KMA's Recent Activities

JMAJ 50(1): 80-88, 2007



Dong Chun SHIN*1

Introduction

Today, the world is facing disasters on unprecedented scale: more than 255 million people were affected and 58,000 were killed by natural disasters globally each year on the average. In other words, 1 in 25 people worldwide was affected by natural disaster. Economic losses were also enormous around 67 billion USD per year on average.¹ Since there are many reports and research results that these numbers will continue to rise, the roles of experts who work for disaster preparedness in the area of governmental and non-governmental sectors, including us as physicians, who are responsible for people's healthcare, are getting more important.

According to the International Strategy for Disaster Reduction (ISDR) of UN, the natural disasters are split into three specific groups,² **Hydro-meteorological disasters** (floods and wave surges, storms, droughts and related disasters), **Geological disasters** (earthquakes & tsunamis and volcanic eruptions), and **Biological disasters** (epidemics and insect infestations). Among those three groups, hydro-meteorological disasters were rapidly increased for the past 20 years and this might be caused by climatic changes due to global warming. For the next, biological disasters and geological disasters follow. In case of earthquake and tsunami, the number of occurrences is relatively low, but its strength is much more than other factors. Especially, it is reported that the Asian and Oceanic regions were the most affected continents by earthquake and tsunami for the past decade and the affected countries were relatively poor countries as the following tables show. (Table 1, 2)

The efforts for preventing large-scale damages from earthquake and tsunami and coordinating swift relief hands have been made both in global, regional and domestic levels.

One of the practical efforts, in early 2005, 'the UN/ISDR Asian & Pacific' launched "Evaluation and Strengthening of Early Warning Systems in countries affected by the 26 December 2004", in cooperation with many international organizations.³ As part of this project, Tsunami Early Warning Information System (TEWIS) was made through the support of the Japanese Government, which is now utilized as collective data resources.

The WHO headquarters and its regional offices in South-East Asia and Western Pacific Region have provided technical guidelines for the emergency responses and cooperated with other international organizations.

Under the umbrella of World Medical Association (WMA) and Confederation of Medical Associations in Asia and Oceania (CMAAO),

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	Hydro- meteorological	Geological	Biological
Africa	1.30	0.37	7.31
Americas	6.23	0.31	1.13
Asia	5.19	7.54	0.39
Europe	4.77	0.23	0.03
Oceania	1.92	5.06	0.62

Table 1 Average number of people reported killed, per million inhabitants by continent and disaster origin 1991–2005

(EM-DAT. The OFDA/CRED International Disaster Database⁴)

Table 2 Number of people reported killed by type of disaster and level of development 1991–2005

	Flood	Wind	Drought*	Slide	Earthquake & Tsunami	Volcanic eruption	Epidemic	Total
OECD	2,150	5,430	47,516	426	5,910	44	442	61,918
CEE+CIS	2,635	512	3,109	1,176	2,412	0	568	10,412
Developing countries	97,061	65,258	12,599	9,369	397,303	900	47,616	630,106
Least developed countries	20,127	149,517	3,320	1,739	9,247	201	70,588	254,739
Countries classified	99	767	57	23	2,277	0	104	3,327
Total	122,072	221,484	66,601	12,733	417,149	1,145	119,318	960,502

*: Drought related disasters category includes extreme temperatures

(EM-DAT. The OFDA/CRED International Disaster Database⁴)

member National Medical Associations (NMAs) could cooperate when disaster occurs and share information for emergency relief activities. The WMA also had adopted its Statement on Medical Ethics in the Event of Disasters in 1994 and now is working on revision.

Backgrounds

In Korea, relief medical efforts for disasteraffected areas have been invigorated by nongovernmental organizations (NGOs) including religious groups in the sidelines of governmental supports. Recently, their scope of activities is expanded increasingly to overseas. While governmental relief efforts are mostly concentrated on immediate responses within the day of disaster occurrence and grasp of damage situation along with establishment of base camp for other organizations, non-governmental relief works involve with provision of relatively long-term cares to patients affected and financial supports for hospitals in disaster areas where their activities have been carried out.

The Korean Medical Association (KMA) has been taking initiatives in coordinating those relief works among non-governmental sector. The KMA has Community Cooperation Team committed to this mission inside of its secretariat and it is now operating a Network for Voluntary Medical Cares composed of NGOs-which is composed of general hospitals and individuals interested in conducting medical care activities in disaster occurrence. The Network was launched in an effort to unify scattered individual efforts of voluntary activities among non-governmental organizations into one channel. Member organizations have their own teams for relief medical care and train medical staffs on a regular basis. When a disaster occurs, the KMA takes the lead in coordination and in building up medical teams to be deployed within three days and supports the whole procedures. This Network is for both inside and outside of Korea.

Since the matter of security should be essentially ensured for the team members, the KMA thoroughly checks information with the Korean Governmental Agencies in disaster areas and has local Ministry of Health and local Medical Associations as major contact points.

Experiences of Two Representative Relief Medical Services in 2005 during Tsunami in Indonesia and Earthquake in Pakistan

Tsunami in Indonesia

The KMA Medical Aid Team (KEMAT) conducted relief medical services for 31 days from January 5 to February 4, 2005 in Banda Ache, Indonesia, the worst affected area by Tsunami. Four teams had been deployed to the scene in turn with each team being made up of 20 members. Each team were further divided into two groups on the scene and work in two different units, one inside of a refugee camp in Mataie and the other in Ketapang, the outskirts of Banda Ache. We worked in tandem with the Indonesian Medical Association (IDI) and the IDI helped us a lot from transportation to places for staying and treating patients. The KEMAT's medical activities involve with following three parts: treating patients, immunization and vaccination, disinfection project.

Patient care

The four teams provided medical care to patients both in emergency and in chronic condition. The total number of patients taken care of by the KEMAT reaches 5,000 altogether with the daily average of 238 patients. Respiratory problems seemingly resulting from water inhalation at the time of tsunami were common and acute respiratory problems were found with high frequency. This might have been inherent in unsanitary living conditions in refugee camps, where too many people had to live so closely to each other. Laceration and abrasion were the main types of skin problems and several cases of tetanus were identified in both consultation units. There were high probabilities that those patients got contracted tetanus from relief efforts with their bare feet. No specific case of water-borne diseases had been identified in neither units, but identification of eye problems were relatively frequent, apparently as a particular situation brought forth by water disaster.

From the third week of relief services, number of repeat patients had increased. Those patients revisited our units for follow-up care of their wounds surgically treated by Korean doctors before or of children fever firstly prescribed by Korean doctors.

The KEMAT also dispensed vitamins to prevent malnutrition. Some patients managed to live with salt only for a week and even for 10 days. Better distribution of food and effective system of ration should be established for the future.

Immunization, vaccination and field assessment In Banda Aceh, UNICEF proceeded with vaccination program to prevent children of refugee camps from being infected by communicable diseases in collaboration with the IDI. The KEMAT also joined this effort and conducted vaccination from one camp to another. The WHO and the CDC provided Four hundred vaccines against measles, rubella, mumps, etc.

In the meantime, some of member physicians conducted a field research to collect the latest grasp on the public health and sanitary status in Mataie refugee camp as relief and medical assistance activities entered in a stable phase. The result of this field research had been reported to the UN and Indonesian government.

Disinfection project

KEMAT took a large-scale disinfection set with them to the area and carried out disinfection activities at least twice a day around refugee camps to keep health conditions clean and prevent communicable diseases. This helped promote public awareness on sanitation among local people because of its visible effects. Disinfection activities were expanded to other nearby refugee camps by the requests of people there.

Earthquake in Pakistan

For timely and successful relief activities, it is essential to secure transportation way to disasterstruck areas. It is more important when the affected areas are remote and mountainous. Mostly military helicopters and planes are committed to the areas for people and logistics, however, military transportation is usually not enough to cover the whole needs of relief groups and they need to depend on other systems. This time, the KMA worked in the earthquake-hit areas in close partnership with a Korean express company running in Pakistan and there were no major problem in delivering medical staff, medicines, medical supplies, etc. For relief medical activities for about three weeks, from October 14 to November 6, 2005, three teams from the Network for Voluntary Medical Cares which had been

deployed by the KMA, in turn to Abbottabad, the entrance to Muzaffarabad, Balakot and Mansehra, the most severely affected villages, two hour distance from Abbottabad. Severely injured patients in serious conditions were being evacuated to the bigger cities—Islamabad, Lahore and Abbottabad—where hospitals were still in operation. KEMAT set its base camp at the Ayub Medical Complex in Abbottabad and offered medical services in close collaboration with Pakistani doctors from the complex. KEMAT was divided into two groups and mobilized one of them to Balakot, where patients with serious injuries still desperately waited for medical attention.

Patient care

All patients were asked about their names, ages, genders and major complaints before going through consultation and medical records of patients were classified every night as internal problems and surgical problems first. Then they were further classified by specialties. Contusion and skin problems were the most common factors to visit, and the next was fracture. Patients suffering from traumatic injuries were also common and there were some cases needed amputation. Overall, conditions of patients with external wounds were more serious and more cases of trauma were identified compared to those in tsunami.

For internal parts, the number of patients coming down with the Acute Respiratory Infections continued to rise both in the Ayub Medical Complex and in the Balakot Mobile Clinic, apparently due to the huge difference of temperatures between day and night. In Balakot mobile clinic, cases of diarrhea and skin diseases as scabies were at the top of the list. From the second week of relief services, quake-related emergency patients have been decreased prominently and repeat patients to want to get followup treatments were continuously on the rise.

Sanitary promotion project

The KEMAT took preventive measures to improve sanitary condition of the area and to promote local people's awareness. It distributed people 1,000 sets of sanitary packs composed of soaps, toothpastes and toothbrushes. KEMAT carried out disinfection activities at the Ayub Medical Complex, but it was not enough to cover the whole refugee camps at the complex. Shortage of lavatories caused mounted excretions here and there, and this was raising a great concern on public health.

Suggestions on Disaster Policies

As a non-governmental organization representing over 80,000 physicians in Korea, the KMA has been working hard to carry out its ultimate mission, that is "Dedication to the enhancement of health and human life". To fulfill this mission, the KMA has been extending its efforts in various ways, and among them, the voluntary medical relief activities at home and abroad is one of the important parts. The KMA sent its medical relief team to Yokyakarta, Indonesia from May 31 to June 8 this year when the earthquake hit that area. Cooperation between the Indonesian Medical Association and the Korean Medical Association is now systematic and this time, the local medical association of Indonesian Medical Association was the acting counterpart for the KMA team's relief activities. At home, the KMA has actively played its role when the nation-wide disaster by recent flood in July this year.

Since there are many expert groups in this field and many GO/NGO authorities, which have their own disaster policies, the KMA's experiences might not be enough to suggest those policies. However, from a point of practical view of KMA, the followings should be considered for our better preparedness and responses to future disasters.

Disaster primary cares and cares for chronic patients

To sum up KEMAT's relief services in Indonesia, they played a role of the frontline primary care providers to treat patients who were saved from emergency lists but still needed urgent medical attention. Proper cares for those patients were important because their conditions could go worse from bad. By the same token, if NGOs or other parts can play a role of primary care providers on disaster spots and focus on treating patients who are relatively less severe but in need of immediate medical attention, it can alleviate possible lack of health facilities and contribute to establishment of patient delivery system in emergency situation.

Significant medical needs for treating patients suffering from chronic diseases should be the other part of medical relief activities. Most of health facilities collapsed by the disaster and many chronic patients lost their medications. Medical relief services focus on emergency patients mostly, so they are susceptible to be on a blind sight of medical care for the time being until local health facilities are completely recovered. Conditions of chronic patients are easily deteriorated from all the stress and lack of proper medical cares.

Cultural differences even in emergency

Relief medical care should not be an exception to cultural differences. Understanding on cultural differences is essential for better communication with patients and getting a whole picture of patients' needs. During the medical relief services in Banda Aceh, a physician member recognized that doctors need to visit from one refugee camp to another to provide medical care to people in need, rather than just wait in the same consultation tent because Acehenese hesitate to go see a doctor on cultural reasons. They feel like going hospital is too extravagant, so they are accustomed to enduring pain. Again, in Pakistan, KEMAT faced up to an unexpected difficulty with a cultural origin. The period fell into the Ramazan there and patients stick to fast from sunrise to sunset. This holy practice forced medical teams to readjust medicine-taking cycles so that efficacy of medicine could be preserved and lead to a fast recovery.

Experiences from tsunami in Indonesia and earthquake in Pakistan made us realize why the open-mindedness and tolerance to other culture is especially important in medical field and by extension, in an extreme situation.

Better coordination and role distinction

We have experienced both in Indonesia and in Pakistan aid bottleneck problems. This was partly attributable to ill coordination coming from lack of control centers. Local ministry of health and several international organizations took initiatives and hosted extended meetings among relief groups on the scenes but failed to build up a unified coordination system. Without a unified coordination system, information on damage status varied from organization to organization and efficient manpower distribution is hardly achieved. There were too many relief medical manpower clustered in one part, while in other parts people were still waiting for medical attention. To build up this system, cooperation and role distinctions among international relief organizations and relevant groups at ordinary times is necessary.

Under current operations, an organization covers all the procedure from field assessment, manpower and relief foods distribution to patients care and vaccination. Each part needs to be split among organizations and the network to connect each process should be established and shared worldwide. It should also include role distinction between governmental organizations and non-governmental organizations. Then NGOs and other relief groups deploy their own relief teams depending on information disseminated from the network. Establishment of the network and role distinctions in that way will go a long way in solving bottleneck problems. Local medical professionals and relief groups should be in the center of the network and they should take initiative to set relief policies.

Relief medical network among NMAs and role of the WMA

For the last, the relief medical networks among NMAs within the framework of each governmental relief activities network are necessary. The KMA also reaffirmed through its experiences that the cooperative relationship among NMAs is crucial and it could be possible because the NMAs had close relationship in normal times within WMA and CMAAO. The KMA was able to take a quick action and push forward with its relief service plans with the cooperation of the Indonesian Medical Association and local medical professionals. Their cooperation was especially useful in medical aspects as we can get primary information on medical practices there and cultural differences to be considered in the process of treatment. Establishment of a relief network among NMAs has several edges because it can be specialized on medical care provision in disaster situation and makes quick medical responses possible using respective NMA's own local networks. Maintenance of this network is meaningful when we think of patients' handover for further cares from relief teams to local medical professionals after the end of relief activities.

The WMA has provided an ethical guideline for patient care in disaster area to adopt its statement on Medical Ethics in the Event of Disasters in 1994 and the revision of this policy is ready for approval of the next General Assembly in Pilanesberg, South Africa, in October, 2006. I believe that the WMA, as a global representative of physicians, will continue not only to provide us with the principle that we physicians need at the site, but also to play a role as a bridge between physicians and the relevant authorities, including governmental and other international organization when they establish disaster policy.

Summary

Since 2004, the KMA has actively taken the lead in providing medical services when the disaster occurred in and outside of Korea. For the systematical preparedness, the KMA organized the Community Cooperation Team under its secretariat and the Korean Emergency Medical Aid Team as an executive medical team organized by physicians, nurses, pharmacists and administrative personnel. This team could conduct relief medical services in Indonesia and Pakistan in 2005 and once again in Indonesia in 2006 when they are hit by historical huge disasters.

With those valuable experiences, the KMA recognized the importance of central coordination among various relief works among non-

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governmental sectors and initiated to set up a Network for Voluntary Medical Cares composed of NGOs—which is composed of general hospitals and individuals interested in conducting medical care activities in disaster occurrence. Moreover, the KMA feels that a worldwide unified coordination system among governmental organizations and non-governmental internatonal organizations needs to be established for efficient relief medical services.

For this system to be working properly at disaster scenes, cooperation and role distinctions among relevant groups at ordinary times are necessary. Each process of relief medical efforts needs to be split among them and their respective information should be shared through a unified information network. Local medical professionals of disaster-affected-areas should play prominent roles, as they are best versed with the local circumstances and cultural carefulness in treating patients. In this respect, a relief network among NMAs within the framework of a unified information network on the international level will have great opportunities to contribute to future relief medical services. Collaboration among NMAs are especially beneficial given that it can be specialized on medical respect under emergency situation brought by disasters.

the UN Development Programme (UNDP), the UN Office for Project Services (UNOPS), the Asian Disaster Reduction Center (ADRC), the Asian Disaster Preparedness Center (ADPC), the Asia-Pacific Broadcasting Union (ABU), the Center for Research on the Epidemiology of Disasters (CRED), the All India Disaster Mitigation Institute (AIDMI), and the University of Geneva

 EM-DAT. The OFDA/CRED International Disaster Database. http://www.em-dat.net, UCL—Brussels, Belgium





















EXPERIENCES OF RELIEF MEDICAL SERVICES - Tsunami

- Disinfection Project
- At least twice a day
- At least twice a de
- Expended its disinfection activities to other nearby refugee camps by requests



KOREAN MEDICAL KMA

EXPERIENCES OF RELIEF MEDICAL SERVICES - Tsunami

Immunization, Vaccination and Field Assessment

- Korean Emergency Medical Aid Team (KEMAT) joined UNICEF vaccination program in collaboration with the Indonesian Medical Association.
- Latest information on the public health and sanitary status collected by the KEMAT was reported to the UN and Indonesian government at the site.





KOREAN MEDICAL KMA

EXPERIENCES OF RELIEF MEDICAL SERVICES - Earthquake



KOREAN MEDICAL KMA

EXPERIENCES OF RELIEF MEDICAL SERVICES - Earthquake

- Sanitary Promotion Project
 - Distributed 1,000 sets of sanitary packs
 - Disinfection activities
 - · Need more supports on the sanitary problems



KOREAN MEDICAL KMA

SUGGESTIONS ON DISASTER POLICIES

- 1. Patients having chronic diseases also should be cared as well as emergency patients.
- Understanding the differences from culture and religion is essential for better communication with patients and getting a whole picture of patients' needs.
- Unified coordination system is necessary and it is essential to define cooperation and role distinctions among international relief organizations and relevant groups during ordinary times.
- Maintenance of relief medical network among NMAs is necessary for quick responses, efficient activities and continuous patients care.





Crisis Management for Infectious Disease —Global situation on pandemic influenza and its preparedness

JMAJ 50(1): 89-100, 2007



Takeshi KASAI*1

It is my great honor to have this opportunity to present a paper at this very special meeting. Today I would like to talk about the global epidemiology on avian influenza and pandemic preparedness, and I hope I can provide some of the discussion point which are relevant to this session.

My talk consists of three parts. In the first part, I would like to briefly touch upon the issue that will provide the answer to this question, why we are so concerned on this issue. In the second part I would like to update current situation and share our epidemiological analysis. And lastly, I would like to talk about the response. And of course, I'm more than happy to receive questions at the end.

Why we are so concerned?

So, why we are so concerned about this pandemic —history will tell us. These are the three pandemics recorded in the 20th century. In 1918 we had Spanish Flu. Although it's called "Spanish Flu" it was originally from the battle line of the First World War in France and Swiss. Fourty to 50 million deaths were estimated. In the Japanese newspaper in those days, we can read, for example, "The railway operation needed to cut down operations because of the 7,500 absentees"; or "Mr. Hogetsu, a very famous stage director, passed away because of the world flu"; "Dead bodies piled up due to the crematory capacity overflow"—these were the headlines we read in the newspaper.

In 1957, it was not so hard as Spanish flu, but still 2 million deaths were recorded. There was a report in Japan that half of the population was infected during this pandemic.

Similarly, in 1968 the Hong Kong Flu had 1 million deaths, and needless to say, significant social disruption and economic damage were recorded during these pandemics.

This is a slide showing the major influenza by year: 1918–1957, H1N1; 1957–1968 H2N2; and since then, H3N2. This slide will tell us two things. First, one type can never continue to be a major strain and changes at some point. Some biologists explain it as antibody pressure, meaning that gradually many people become immune, and at some point they have to change dramatically their antigenic characteristics to survive. And second, when you have the new strain, that is the time we have the pandemic.

This is the picture of an influenza virus, and we can see the spike on the surface of the virus particle. There are two types of spike. One is called hemagglutinin and the other called neuraminidase. Those are the antigens that define the particular strain of influenza. These two spikes have a significant importance when we talk about the pandemic influenza. Hemagglutinin functions when

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the virus enters the host cell, and neuraminidase functions when they replicate and escape from the cell. Therefore antibodies to block hemagglutinin is one of the most important defense. In other words, if hemagglutinin changes, none of us immune, and as a consequence, there will be a possibility of significant outbreak, i.e. pandemic.

By the way, the vaccine is developed from these viruses either using this whole particle or partially disrupted, i.e., it is split or purified envelope antigen. So in the consequence, this becomes very important.

So, in the generation of the next pandemic virus, how and where can the influenza virus acquire new hemagglutinin, as Dr. Boswell yesterday mentioned. It can either get from avian influenza as a result of the re-assortment, or slowly adapt as in the case of 1918 viruses.

Then where will those hemagglutinin, new hemagglutinin or neuraminidase introduced to human populations? There are wide ranges of reservoir, especially birds have H1 to H16 and N1 to N9. This is something related to interaction with their speed of mutation. The birds move very slowly; humans move very quickly. As a result, birds reserve many H types.

So, this slide shows that we need three triggers for the conditions for pandemic. This is the slide explaining the general conditions. A novel virus emerged in animals; the virus demonstrates that it can pass from animals to humans and cause human diseases; and it develops capacity to transmit efficiently from human to human. As you can see, only the last conditions are not met in this pandemic situation.

Human epidemiology

Now I would like to move into the second part of my presentation. Dr. Omi presented the overall view yesterday, so I would like to focus more on the human epidemiology.

As of August 23rd of this year, we have 241 cases reported from overall 10 countries around the world, and out of that 141 are fatal, giving the case fatality rate of 58.9%. Vietnam has the largest number of the cases, followed by Indonesia, and among the countries with more than 10 cases, Indonesia has the highest case fatality rate of 75% to 80%.

Now this slide, the line shows cumulative total and you can see the rapid increases in 2005. And in the first two or three years, there are three peaks, noted around every first quarter of the year, ranging from 39% to 63% of the total case per year. But it seems this trend is now disappearing. Many cases just continue to be reported, so this seasonal trend now seems to be disappearing.

This is a slide Dr. Omi already showed yesterday. The spread of the epidemic to countries has dramatically increased since November 2005. Vietnam has the highest number of the cases between December 2003 to July 2005, and Indonesia from August 2005 up to now. There were 17 clustering of cases-clustering meaning two or more cases closely linked geographically or socially-involving 46 cases, 7 clusters with the 46 cases. Of this, clustering six were from Vietnam with 223 cases per cluster and Indonesia with 5 clusters ranging from 227 cases per cluster. Average cluster a month in the reported cases nowadays is 10% to 50%, but Indonesia is recording about 33%-significantly higher cluster cases reported to be coming from Indonesia.

Ages of the cases range from 3 months to 81 years, with a median of 19 years. Ten percent of the cases were below 5 years old; distribution of cases by age group in all countries was almost similar. And cases were also almost equally distributed by gender. There were no significant differences by the gender.

Out of 202 reports analyzed, as I mentioned in the first slide, 59% were fatal. The deadline shows the trend of case fatality rate calculated based on cumulative deaths over cumulative cases. It was about 73% in 2004, then has declined markedly to 43% in the early part of 2005, and now it has been slightly increasing since then. This is because of the Indonesia's high case fatality rate.

And this is the line that WHO is carefully monitoring since sudden change. This sudden drop might indicate some biological changes such as acquired ability for human transmission.

This is a graph showing the outcome by age. Half of all fatal cases were below 20 years. The case fatality was lower in cases 40 years old and above. And you can see the differences in the graph, the statistical analysis resulted in significant differences by age group. The case fatality rate was highest in those in 10 to 39 years, and lowest in those over 50 and in children under 5. This is unlike seasonal influenza where the highest mortality is found in the very, very young and the very old age group. This is the point Dr. Iinuma raised at the very beginning of this session. This is the final slide on the second part of my presentation. The number of days from the onset of symptoms to death ranges from 2 to 28 days with a median of 9 days. The median is decreasing from 2003 to 2006, but there are no significant statistical differences. The other factors such as access to facility and quality of the care, use of anti-viral drugs, and complication frequency also affects this outcome, but we don't know and we don't have on hand such information with us to analyze in more depth.

The information lacking here is the information about the clinical range or the clinical implications. We once organized a meeting in Hanoi, 2005, and published the result in the New England Journal of Medicine in the same year, 2005, in its September issue. I would like to ask for your support on this specific issue, that the clinical information coming from the clinicians is vital for WHO or the global community to further analyze those clinical implications. And I have to admit that the clinical information is definitely not sufficient at the moment.

Phases of pandemic alert

I would like to go into the last part of my presentation. WHO divides the stage of pandemic alert into six, and the current phase remains at Phase 3.

This slide shows different stages of intervention in avian and pandemic influenza. We need to avoid AI activities in animals to avert the emergence of new strains of human influenza, but if we fail in that stage, and if there is a possible effective human to human transmission, then we have to implement or deploy rapid response activities to contain the possible human to human transmission. If we are unfortunate, then things will go into the worst scenario. That's the time we have to switch on the response plan for the worst-case scenario.

Currently, most of the countries are focusing on AI in animal. Many donors put the money, and then collaboration with the Ministers of Agriculture and Ministers of Health is become emphasized, and things are going towards that direction. But no substantial work has been done for this worst-case scenario.

I just want to stress one point using this slide. This red line shows what local governments or the people in the community can do at each respective stage. In the AI in animal, there is a focus, so together with the green line you see things that the central government or international community can do. So in the AI in animals, there is a focus, where international community or the central government can come in, together with the local governments or community, they can do a lot of work for this stage.

Rapid response and containment: I'm going to explain more details about the concept and what we're going to do at this stage, but basically in those stage, there are massive drugs coming from the international community and together with the central government, international community will take a lead in response and containment activities. So there is a huge amount of work that the central and international community can do.

But when we reach the worst-case scenario, worst-case situation, the pandemic is everywhere. That means, unlike earthquakes or tsunami, or other natural disasters, you may not expect the help from your neighbors, or help from the central government, i.e., the local government or local community need to do things by themselves. And then assistance from central government and that of the international community will decrease quite dramatically.

So, now I would like to elaborate a little bit more on rapid response and containment activities and pandemic response. The basic concept of rapid response and containment activities are listed up here. Mass administration of antiviral drugs with the outbreak zone is the cornerstone of the containment strategy. But that is not enough. It requires other public health measures, such as area quarantine and social distancing aimed at reducing transmission within an area and minimizing the spread beyond it. This is an attempt to alter the natural course of the pandemic in its starting stage.

By the way, I would like to take this opportunity to express my appreciation to the people of Japan in supporting their efforts in establishing the stockpile, 500,000 courses of Tamiflu and also the TPE established in Singapore. With this, I think the Asian region may become much stronger in terms of the preparation of this rapid response and in containment activities.

But there are many things we have to prepare in addition to this regional stockpile. For example, respective governments need to prepare the rapid authorizations in landing of the plane which carries the Tamiflu, or pre-licensing of using those drugs, and also we need to have proper storage when international or regional stockpiles come in.

Rapid response and containment activities consist of three steps. Step 1 is to detect the early signals of possible human to human transmission, and yesterday we had the question on this regard. The definition, or the criteria, we are now suggesting to our member states is three or more person geospatially or socially linked with unexplained moderate to severe acute respiratory illness, and with onset of illness within 10 days of each other, and of course, if possible, the information about the exposure to H5 virus. If that is confirmed, there will be a team dispatched to the site and do further assessment. The assessment would focus on verifying whether there is a human to human transmission. And this information, for example, the information that there are two or three health care workers who treated the patient confirmed as H5 but they have no exposure, this is the very strong evidence that human to human transmission, or effective human transmission is already ongoing. That's the time the national government together with the WHO would deploy the containment activities.

But I also want to stress at this point, it is not always a "go situation"; there sometimes exists a no-go. For example, if it is too late, we don't deploy containment activities, and if we think it is impossible to deploy, we don't deploy. If we have the cases in Tokyo with huge population movement, we don't deploy. So this is a case of no-go in this containment activities.

I'll just quickly go through the several slides. It's sort of animated slides to tell how the containment activities work. This is Day 0 and this is Day 3 without the no-intervention situations. It depends on the basic reproductive rate, but it goes without intervention within 9 to 12 days if their production rate is about 1.2 to 1.6. In 9 days, all the patients will be infected. But it will be Tamiflu prophylaxis, and if those people are given the drug, there is limited space for the virus to infect. So in a way, it's like a blanket when we have the small fire. I think we use the blanket to cover the small fire to contain it, or in the smallpox contingency plan, we have the strategy called "Link Wall Prevention". We make a wall with the drug so that the virus will not escape from that area.

But drug intervention is not enough, because if there is an area with intervention adjacent to an area without intervention and if there is population movement, this is the result. So, in addition to masks, we need to organize a quarantine of the area, i.e. restriction of comings and goings. This is a massive challenge for us. The health sector alone cannot organize the activities, and once we quarantine, we also have to think about the food, water, lifelines—all those things within this quarantine area.

And one of the biggest challenges is that, as Dr. Omi mentioned yesterday, to make this operation successful, there is a limited window of opportunity that is about two to three weeks from the onset to detection and decisions. Currently the average is 16.7 days, and obviously unless we shorten this period, we may not have the success. Again, the information is critical, and this is one of the areas that the WHO needs big support from the clinicians working in the front line.

As I mentioned, if rapid response containment activities may not be possible or not successful, we have to switch to the last worst-case scenario response plan.

Medical and non-medical intervention

I just want to use one slide and explain the differences with the stage of containment, and the pandemic stage. The objective of medical intervention dramatically changes between the containment phase and pandemic. During the containment phase, how to prevent further spread and contain the foci is the main objective, and it was exactly the case of SARS. The suspected case should be hospitalized in the designated hospital with the isolation facilities. On the contrary, during the pandemic phase, if it moves from the containment to pandemic phase, it is very reasonable to assume as Dr. Boswell presented to us, that all healthcare facilities will be under the pressure of clinical demand. The patient will be everywhere, and during this phase, the objective will be how to maintain health care function while minimizing the nosocomial infection. Infection within the clinical settings is the biggest challenge. Infection control is the crucial element, and I would like to remind the audience that during SARS we lost a lot of health workers, including physicians. We need to triage patients and treat severe influenza cases, but we also have to maintain the minimum essential medical services to those who need them.

We may have to also ask the physician to move

from their original place to assist the hospital which is functioning during that phase. In my previous assignment, where I worked in the local government in Japan, the plan of prefectural governments has an element which prioritizes the hospital that provide the service for severe influenza cases. The doctor who is willing to support that hospital would come and support that hospital.

I would like to stress two points here. First is the fact that we, the medical profession, are actually one of the most high risk groups. I think we should not keep our eyes away from that, but we should be prepared for it. Second, the healthcare facilities are the places where you have vulnerable population such as elderly or with a chronic condition; thus it is potentially a contagious avenue unless there are proper precautions installed. So we have to protect ourselves and also we have to protect our patients in a condition.

Again, I would like to stress that the information coming from the frontline, the clinics and hospitals, is a very crucial item during this phase.

This is the slide also Dr. Omi showed yesterday in his presentation. The plan for worstcase scenario constitutes of these elements. You should have the medical intervention, and in addition to medical intervention, you also need non-medical intervention as indicated there. And as I mentioned with the previous stage, in this pandemic stage, the objective of medical intervention is not the isolation but to reduce the morbidity and mortality and limit the further spread of diseases to minimize the nosocomial spread of disease by implementation of infection control precautions. And that is very crucial at this stage. But those medical interventions or non-medical interventions-so-called public health measure -are not enough.

In addition to those public health interventions, which the health sector can work out, we need help, or we need to ask other sectors to work and prepare for it. These are the social service functions we can see during natural disasters. For example, how to deliver the food and water supply, power supply, transportation, telecommunications, and other essential services. WHO is encouraging all these sectors to think about business continuity while their 25% to 30% of employees will be absentees.

So I would like to stress once again, that in this worst scenario, pandemic is everywhere, i.e.,

unlike earthquakes or tsunami or other natural disasters, each local government or each community needs to prepare by themselves. The WHO, international community, or probably also the central government can only do limited things during that phase. In other words, we have to prepare now before things happen.

Where are we now?

Then where are we now? This is also the slide Dr. Omi used in his presentation yesterday. Most countries have developed national pandemic preparedness plans, and some countries have conducted or plan to conduct table top exercise. They already conducted a table top exercise. I would like to suggest that the medical associations also involved in the pandemic exercise are organizing at the national level. I understand that the Government of Australia is planning to organize their exercise in the coming October, and I heard that the medical association is also taking part in it.

But pandemic planning, or the exercise, is not really the ending point. Pandemic planning is an on-going process, and we need to invest more and we have to involve other sectors, as I mentioned in the previous slide, the other sectors which we need in pandemic situations. So there still are a lot of things for us to do.

Summary of current situation

This is my last slide. I think nobody can predict whether or when the mutation or adaptation will occur, but the increased exposure of humans to H5N1 resulting from its global spread multiplies the opportunity for it to do so. And increasing exposure raises the importance of preparing for pandemic. Even if the pandemic caused by avian flu never occurs, the same preparation will protect us against other pandemics. Although we are experiencing more than 200 cases, we are still missing basic epidemiological information, clinical information, and to fill all those gaps there is a need for better standardization of the data collection. But also we need very good networks, and collaboration among those who can provide the data is now essential.

The WHO would like to ensure, and I would like to commit at this point to put utmost efforts to monitor this situation and also to work with the member nations in preparation of pandemic. Thank you very much.

Global Epidemiology on Avian Influenza and Pandemic Preparedness

Dr Takeshi KASAI Regional Advisor Communicable Disease Surveillance and Response World Health Organization Western Pacific Regional Office Current Situation of Avian Influenza

- 1.Why we are so concern?
- 2.Current situation
- 3.Pandemic preparedness











Conditions for a Pandemic **3 Triggers** • A novel virus emerges in animals • The virus demonstrates that it can pass from animals to humans and cause human disease • The virus develops capacity to transmit efficiently from human to human





























































- · Preparation for social service
- · Investing in resource
- Testing preparedness plans (e.g. exercises)
- Regional & international collaboration



Summary of current situation

- A virus which has already become entrenched and is expanding to neighboring regions
- Number of human cases is still small considering the size of the spread of virus in 'birds'.
- The increased exposure of humans to H5N1 resulting from its global spread multiplies the opportunity for it to adapt or mutate.





Medical Associations in the Future

JMAJ 50(1): 101–103, 2007



The first disclaimer is that "Provocation" was not the title that I engineered myself, it comes from the Secretary-General. So anything that I say that might no go down well, we have the Secretary-General to blame.

It's very difficult as a young person to speak to seniors and talk about the future, but maybe what makes it easier is that being relatively, I see myself as a part of the future. And I'd like to liken what we need to do to what happens at weddings. Three things that you need in weddings. They say you need something borrowed, something old, and something new. There are some old things that we need to take forward into the "New Look" medical association. And those old things that we need to take forward are social leadership, which needs to be restored by our exemplary behavior and our involvement in society.

What we need to discard is our traditional paternalistic manner in which we practice medicine, like we know what's good for the people and we decide for them. Even though I believe we could be helpful to people, we've got to be less paternalistic in terms of how we conduct ourselves.

Something that needs to be restored is the restoration of our ability to treat everybody that needs our services. That means in the background, collectively we've got to look at how health is funded, but at the point where someone needs services, all of us should be in a position to do the best for that person, irrespective of where Kgosi LETLAPE*1

they come from within our society.

We need to discard the old notion of deciding for patients; we need to inform patients so that they can make their own choices based on adequate information, and that would go a long way to dealing with disasters properly. One of the key issues is to inform people. And once people are informed, they usually make the right decisions.

There are things we could borrow, particularly from politicians. And what we could borrow from politicians is that we should know our constituencies. "The Patient First"—we should rephrase putting patient first, and we should resist calling them customers. And the only thing that we could learn, that we could borrow about customers is that they are always right, but that we should apply to our patients—that they are always right. When a patient doesn't make the right choice, it's because you've done a poor job informing them, and that should be the attitude that we borrow.

What we should borrow from politicians is to increase our circle of influence in a democracy, and we must all remember that patients are by far the largest group of voters, because anyone that's not your patient now is a patient in the making, so nearly 100% of the citizens in your country are patients or potential patients, and they are voters.

We must also remember as we borrow from politicians what we should not bring into our area is being partisan. We should be political, but

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we should remain non-partisan, for we have to serve all people, and that is what will ensure that communities continue trusting us. But having said that, what we should borrow from politicians is that if a medical doctor runs for political office, and he's still a real doctor — and by that I mean, he's not a doctor that has turned on the profession, because sometimes you have all these people who get into administration and politics and they turn on the profession, but occasionally some come along that at the core remain real doctors. And if some of those come out, we have a duty to support them, because they can promote the health interests of the nation.

There's a lot that is new that we need to do, and I think one of the new things that we should assume is leadership of the healthcare team. Before, we never led the healthcare team—we were kings, and we thought we reined over other healthcares professionals. We have to be team players, and we have to take our rightful place as leaders of those teams. That's going to require us to be proactive; that's going to require us to live in the present; that's going to require us to make our associations home for all doctors, including medical students.

And importantly, we need to reengineer the area that we operate in. Increasingly there are challenges in terms of can you produce enough doctors to deal with the demand of society? I think we've got to look at it differently and say, "What is it that doctors should be doing, given the investment that nations have put in training them?" I'm an ophthalmologist, and I make my money out of giving people reading glasses. Even a policeman could do that. Now, as an ophthalmologist, I need to be operating at a level where we reduce...blindness; people that need retinal detachment surgery, receive retinal detachment surgery, so that I don't sit treating seasonal conjunctivitis that even a nurse can.

So as people come in to say pharmacists can prescribe, you say, yes, for minor ailments they can.

Let's take leadership in terms of the menial jobs; let's give them to people who that's don't require the time we require for our training so that we lead that healthcare team and we ensure that we lead the debate on human resources in health so that we're not seen as the problem, we're seen as the architects of healthcare delivery systems of the future.

We need to ensure that prevention is part of

what we speak of. And as we talk about prevention, we need to expand the scope of what we influence. And in addition to preventing diseases, NMAs should now move into the area of prevention of wars for two reasons. One, they increase the burden on health systems and sometimes cause their collapse; but secondly, they compete for resources in national budgets. And as we do our job, in terms of preventive wars, we will then insure that governments have enough money to spend on the things that are worth spending money on, like healthcare. And that would enable many nations to be able to double their percentage of GDP spent on health. The money has to come from somewhere, and there are bad areas where money is being spent, and we need to be able to elevate our role, to be advocates for prevention of war.

We need to be the key components of managing diversity so that diversity should enrich and not detract. We need to interact better with civil society. I'm impressed by the fact that the JMA has periodic sessions where they interact with the public. NMAs have to make that a mainstream function of what we do, so that issues of disaster preparedness are things that we should have been involved with a long time ago.

More importantly, we have to learn from each other. But learning from each other means you must live in your reality. I was having a discussion with a colleague that said, "You know for us, the frontline should be a doctor, because they have enough doctors in their midst." When you're sitting in Malawi and you've 500 doctors between 1 million people, if everybody that are sick had to see a doctor, you wouldn't get it. So you need to be creative, you need to live in your reality, but all energies must be focused on a progressive realization of the best possible healthcare treatment and prevention of illness and disease.

We need to be more resourceful, and part of being resourceful is about being more able to manage your resources in addition to being resourceful. You know, gone are the days of walking in as an internist or as a physician and for lack of something better to do, and we don't know what's wrong with the patient, the houseman that gets told to repeat all tests that were the same last week, that were the same three days ago, that were the same two weeks before. We need to understand that we need to provide leadership. Medical expenditure can only be controlled by discerning well-meaning, well-trained physicians, but understand that resources are not limitless. We need to take that role and take it over energetically and meaningfully.

We need to reenergize the protection of the patient-physician relationship and ensure that as we talk about prevention, we must make patients understand that the key determinant of health outcomes is the patient him or herself, that they ultimately take the responsibility for their own health and third parties can assist. And we need to reposition the positions of government or external funders as third parties, and that the responsibility still lies with the patient and that our loyalty is to the patient.

And it is key that people become informed. It's key that we understand that there are other healthcare players. Like, instead of doctors trying to sell nutritional products or go into voodoo, we need to protect the profession that we are in. We need to inform people so that they can tell the difference between a medical doctor and all the other players in health care. They need to be informed so that they can make an informed choice. The longevity that society has is dependent on their lifestyles, their habits as a nation, and medical advances. And as long as we are truthful, we need not fear that patients will go to the charlatans.

We need to ensure that public health education is our duty and the result of that should be an informed society so that they can make informed decisions. That will help us when funders want to downplay treatments, so that our duty is to give the best advice to patients. It is then a collective responsibility to say given what is best, what is available, and what is affordable. And we need to be equipped to deal with our patients in that manner.

Lastly, NMAs have to deal with the gender

issues. In most nations, the majority of medical students are female, and we need to be on the lookout and be proactive about the fact that, as we produce more females, they tend—at least in my country—they tend to have to deal with the balance in their lives. They have to, they still have to raise children if they are in families. They work better hours, which means they are available less. They don't work 18 hours in a day. We need to be proactive in terms of predicting the impact on availability and being able to foretell the numbers of medical doctors that need to be produced.

Now I'll just leave you with a few things. We should not reinvent the wheel, and for that, you must join the WMA, because in that, as you join the WMA, you must come into the organization to participate and to shape its future. It should not be, "What does the WMA do for me?" It is, this is a big, "What can I do to improve the lives of my own constituency, which is the doctors who have elected me into the NMA position, and eventually my own citizens, and at the end, the citizens of the world?"

We have to focus on the patient, and the money will follow, because increasingly, as we focus on the money, the patients disappear.

We have to protect the profession. We have to recognize others, but inform the public so that they can tell the difference between a medical professional and others that are dabbling in healthcare.

We have to continue to be resourceful. Our future is in our own hands, and as elected leaders, we should be occupying positions and we should lead. We should accept that this is a transforming globe. Manage the diversity of students, junior doctors, and senior doctors and keep our eyes open to a changing society that with their high education levels and high access to information, it is important that our patients be informed so that they can make the right decisions. I thank you.

Closing Remarks



Kazuo IWASA

On behalf of the conference organizers, I would like to express my gratitude to all of you, who have come together here from various countries, for your cooperation which has enabled us to conduct a highly fruitful conference.

Main issues addressed at the conference were

- 1) International medical activities in response to natural disasters resulting from earthquakes and tsunami; and
- 2) International medical activities in response to outbreaks of infectious disease that cross international borders.

Both of these kinds of disaster are unpredictable; the possibility of their occurring in the Asian-Pacific Region is high, and dreadful tragedy is anticipated if and when they do occur. There is an urgent need for us, the members of the WMA, to cooperate across borders to contain the spread of such disasters, tragedy, and infection to the absolute minimum possible. Nationality, race, politics, religion, and gaps in wealth mean nothing when it comes to saving human lives. As long ago as 460 BC, Hippocrates swore an oath that is now the basic philosophy of all medical professionals.

As one who had been granted the ability to

practice medicine, Hippocrates swore to serve humanity throughout his entire life. As medical professionals whose duty it is to treat our colleagues as brothers and sisters and treat our patients equally without regard to race, religion, nationality, or social position, we must work in cooperation with the Declaration of Geneva, which was created based on the philosophy of Hippocrates.

It is my hope that, based on the face-to-face relationships established through this conference, in the future we will be able to respond together to issues that we have in common and achieve our common objectives. Thank you all very much for your cooperation.

Vice-President, Japan Medical Association. Vice-Chair of Council, World Medical Association (Japan)



Yank D. COBLE

I appreciate very much several opportunities here. One is to be able to give out so many gifts to so many deserving people. As the father of five and the grandfather of eleven, it is a special treat not to have to pay for gifts for a change. So that has been a special pleasure. And secondly, it's rarely at home that I get the last word, so I thank you for that as well. Then I realize Dr. Kloiber is getting the last word, so I'll have to be cautious all the same.

You picked the topics for yesterday and today of Disaster and the Status of the Profession. Each

region picked their own, and obviously there was much in common within the regions. We discussed disasters very thoroughly. One topic did not come out that has been mentioned several times in other places, and that is the frequency with which disasters occur and physicians who are local are not supported in their ability to continue to care for patients. They are often displaced, and are not given supplies, and not even thought about very much, and oftentimes volunteers and replacements come without helping those particular physicians, so that we need to be sure that we remember to help our own to help others. Often we think of the patients firstwhich is appropriate-but also it's important to remember to help each other help others. And we do have here, in this meeting today, national medical associations which were perfect examples of how to respond promptly to disasters, and we are very proud of you here who have that tradition of responding so very, very well.

The topic of Status of the Profession seems to have several commonalities. And number one is that physicians simply don't do group well together. We are rather independent souls; we focus on patients, and it is often not pleasant to us to have to deal with politicians or the press or the public or the police-the five Ps that Dr. Malik mentioned appropriately. But unfortunately, to be effective we have to be more than just leaders in our traditions of medicine-the ethics and the caring and science-we have to be social leaders as well. And that was part of the purpose of the book, because it not only showed that these physicians that were picked by you were physicians who represented those traditional values of ours, but they showed that these physicians were extraordinary individuals in advocating for the public's welfare. A number of the physicians in this book spent days, weeks, and some, several years in jail being advocates for their profession and for their patients, the public. So often it requires much more than just a sacrifice of our time and resources to be appropriate physicians, and responsible physicians, as some of our colleagues here have just mentioned.

Leadership is what you are defined as possessing by virtue of being here, and there are many definitions of leadership. People who do the right thing for the right reason are people who accomplish a great deal. Tolstoy and Napoleon and Sir William Osler thought that the leaders who were the most effective and meaningful were those who best inspired trust and hope. And in that instance we have a great advantage, because in most of countries, despite us being concerned about the status of the profession, when ranked with other professions and other groups, we still rank among the very top, so that we have great leverage with our patients and the public, even though we are—and sometimes appropriately criticized for the way we conduct ourselves at times. The public has great expectations of us, and so there is much to live up to.

However, at the beginning of this meeting I pointed out we have so much to be enthusiastic about. In every culture in all of recorded history, a very few select people are selected to help the rest of that society through the passage of life, and those people are we. And we have the opportunity to be useful, and we have the opportunity to be valuable. And so we have much to be enthusiastic about. Often we are pessimistic, but we have much to be optimistic about, because it is very well identified, the value that medical science brings to the world economically as well as individually. It is very clear what the family of medicine can do when unified, and that is why several national medical associations have identified as their theme, as their constant message, "Together We Are Stronger."

And then finally, organizations are very much like people. The ones that are resilient, responsive, and capable of continuing renewal, are those that are continuously tough-mindedly optimistic, have staying power, and believe in a mission beyond self-which is a simplified definition of our profession. Words really matter. The word "profession" matters. If it did not matter, our governments would not go to such extreme lengths to try to call us "providers", to try to avoid the word "professional". Even the World Health Day document in April 7 originally did not mention "physician,""doctor,""nurse,""physical therapist," "professional," "ethics," "caring," or "science" until the nurses who found that document by accident, showed it to Dr. Kloiber, and the World Medical Association and the other health professions working as partners together got that document significantly changed. It's not just the World Health Organization; my own government is that way. They want to call us "providers," the least common denominator, because then they can control us better because they think of us as a cost and

expense, but also know that we are a powerful force for the right things to happen. They want to call our patients "consumers". In our textbook, our dictionary, the word "consumer" means "someone who wastes, uses up something"-that's not what a patient is. A patient is hopefully getting something that is of value, not a waste, and the relationship is not the usual caveat emptor of a purchaser-seller relationship. It is a professional relationship. And they attempt to use the word "healthcare" as if it is something that you can manage or give away, but of course, it is an important thing, a relationship between the individual who has the primary responsibility. And gag rules, in which the government or the insurers will legally stop a physician from telling a patient about the preferred treatment, the scientifically proven treatment in order not to mention that those things are available, only what is covered by an insurance policy.

So it will take a great deal of our efforts as an organization, because we can't do it as individuals. We appreciate greatly the support you all have given the WMA, the leadership you've given to the WMA and your national medical associations. We are very convinced that the health of nations is dependent on the welfare of physicians and your advocacy, and we are committed to doing everything that we possibly can to work together.

Thank you again to the Japan Medical Association and your leadership, Dr. Karasawa and the Pfizer Medical Humanities Initiative who have been so supportive. I thank my colleagues on the WMA, officers who have been so supportive of this program, Dr. Kloiber, our Secretary-General who has done a superb job in making these meetings happen. Thank you very much.

Chair of "Caring Physicians of the World" Initiative (USA)





Open Session —September 10, 2006



The First-Day Session Orion, Chinzan-so



Dr. Coble and Dr. Karasawa (Chairs)



Dr. Omi (Speaker)





Welcome Dinner — September 10, 2006



Buffet Party Galaxy, Chinzan-so



Dr. Puente and Dr. Moon Garden Terrace, Chinzan-so





Mr. Jiro Kawasaki, Minister of Health, Labour and Welfare (Left)



Dr. Iwasa, Dr. Arumugam, Dr. Coble and Mr. Keizo Takemi, Member of the House of Councilors (From left to right)


Photo Collection 1st WMA Asian-Pacific Regional Conference

Sessions for the Representatives of the National Medical Associations and Invited Guests —September 11, 2006





Dr. Kasai and Dr. Yamamoto (Speakers)

The Second-Day Session Orion, Chinzan-so



Dr. Boswell and Dr. linuma (Chairs of Session II)



Korean Delegation



Dr. Blachar and Dr. Tsuji







Dr. Shin and Dr. Kloiber



Press Conference





Medical students staff from IFMSA-Japan with Dr. Karasawa, Dr. Arumugam, Dr. Kloiber and Dr. Coble



Photo Collection 1st WMA Asian-Pacific Regional Conference

Conference Dinner —September 11, 2006



Cocktails Hickory Room, Four Seasons Hotel



Dr. & Mrs. Moon and Dr. & Mrs. Boswell



Dr. Takaku and Dr. Uchida



Dr. Wu and Dr. Ishii







Dinner Party Ginkgo Room, Four Seasons Hotel



Dr. Ishii (MC)

FourSeas





JMA Special Public Lecture —Sponsored by World Medical Association—

Sunday, September 10, 2006 1F Auditorium, JMA Office Building (Also screened live in 3F hall)

> Organizer: Japan Medical Association (JMA) Special supporter: Kirin Brewery Company, Limited Supporter: The Asahi Shimbun Company

Program

Moderator: Dr. Takashi HANYUDA, Executive Board Member, JMA

13:00–13:10 Opening Remarks by Dr. Yoshihito KARASAWA, President of JMA, Dr. Kgosi LETLAPE, President of World Medical Association(WMA), and Dr. Yoram BLACHAR, Chair of Council, WMA

Lecture I: Crisis Management of Infectious Diseases

13:10–13:50 Chair of Lecture I Dr. Masao IINUMA, Executive Board Member, JMA

Dr. Takeshi KASAI,

WHO Regional Office for the Western Pacific (WPRO)

Crisis Management for Infectious Disease: Learn from SARS experience and prepare for the Influenza Pandemic (Summary)

Lecture II: Disaster Preparations and Effective Disaster Response Measures

13:50–14:30 Chair of Lecture II Dr. Takeo UCHIDA, Executive Board Member, JMA

Dr. Yasuhiro YAMAMOTO,

Nippon Medical School

Disaster Management in the Acute Phase (Summary)

- 14:30–14:55 **Q&A session**
- 14:55–15:00 Closing Remarks by Dr. Takashi HANYUDA



Public Lecture in the Auditorium of the JMA

Opening Remarks



Yoshihito KARASAWA

Thank you very much for your attendance at this special public lecture organized by the Japan Medical Association.

This public lecture has been sponsored by the World Medical Association (WMA), an international organization with membership comprising 85 medical associations throughout the world; the Japan Medical Association (JMA) has participated in various WMA activities over 50 years since it joined the WMA in 1951. The JMA and WMA are jointly hosting the "Caring Physicians" of the World 1st WMA Asian-Pacific Regional Conference", which is being held today and tomorrow in Tokyo. This regional conference is bringing together approximately 50 representatives of medical associations from countries throughout the Asian-Pacific region to discuss two main themes: responses to earthquakes, tsunamis, and other natural disasters that have been occurring with frequency in the region in recent years; and the problem of large-scale outbreaks of infectious disease which follow natural disasters.

To coincide with this timely conference, the JMA also planned a public lecture on the same themes for members of the general public and personnel in charge of emergency care and dis-

ease prevention in Japan. Highly valuing the relevance of such a public lecture, the WMA has done us the great honor of lending their name to the lecture as a sponsor. I would therefore ask the WMA President and Chair of the Council to say a few words also.

Natural disasters and infectious diseases are problems that reach beyond race, religion, and national boundaries. They are an extremely serious problem that humans must strive together to overcome. As the media has reported, there is a vital need for the general public and above all the medical profession to be well prepared in its daily activities for natural disasters and outbreaks of infectious disease; this lecture presents an excellent opportunity for considering possible responses to these problems.

It is my sincere hope that as part of the continuous efforts of the JMA, this public lecture and regional conference will jointly provide the general public and health professionals with an opportunity to further enhance awareness regarding disaster preparedness.

President, Japan Medical Association (Japan)



Kgosi LETLAPE

It is indeed a great honour and privilege to be with you to share and to learn from this great nation about disaster preparedness. Given your geographic location and climate you have unequal experience in disaster management. We are here to ensure that we are better prepared at all times to deal with disasters and epidemics as a collective because of the interconnectedness of the globe.

As we know viruses do not require visas and the speed with which they travel because of air travel requires us to cooperate willingly and fully so that we can protect one another and effectively curb the spread of pandemics.

Cooperation between civil societies, NGO's like the National Medical Associations (NMAs), Red Cross etc, and Government are an essential pre-requisite of preparedness. Strategies to be employed need to be rehearsed periodically like we do fire drills to ensure that the possible shortcomings are addressed in advance. Proper co-operative structures need to be in place to avoid confusion and maximize efficiency.

We must remember that we can never be too prepared for these situations on the contrary we may be under prepared. Times like these require good social leadership and I am grateful to be a part of the WMA and have the opportunity to interact with the Japan Medical Association and other NMAs for working together to overcome difficulties.

I thank all of you for the services you offer to mankind particularly in critical times of need, for no compensation or remuneration where often the only reward is a simple thank you and eternal gratitude, and not infrequently that is the encouragement we need to continue doing good.

Let us use this opportunity to learn from each other, interact meaningfully and forge partnerships that recognize what each and every one of us and all sectors bring to the table for our collective common good. We need each other now more than ever before.

Thank you for attending, thank you for the invitation and most importantly for continuing to serve humanity.

President, World Medical Association (South Africa)



Yoram BLACHAR

Thank you very much for inviting me to attend this important lecture about disaster preparedness and infectious diseases. It is an honor to be here in Japan and to address this very significant topic from the standpoint of the medical profession.

Although health is not an obvious component of disaster prevention, the effects of recurrent small scale disasters in a community can have severe effects on health. The absence of preplanned coordination mechanisms, analysis and prevention in times of such natural disasters can greatly contribute to the spread of infectious diseases. Environmental conditions arising after natural disasters, such as the earthquakes and tsunamis that have recently affected South Asia with greater frequency, increase the risk of the outbreak of infectious diseases. This is especially true when water supplies and sewage systems have been disrupted. Airborne, waterborne and foodborne diseases such as diarrhea, dysentery, and cholera can occur for up to one month after a disaster. Crowding and unsanitary conditions in evacuation centers can amplify the transmission of infectious diseases. Evacuation centers should therefore be prepared for considerable demands on clinic staff, janitorial services, and the maintenance of personal hygiene.

In addition, when extensive flooding occurs, water and food supplies can become contaminated. This can have a secondary effect of worsening illnesses that already exist in the affected region, and increase the risk of exposure to waterborne agents such as mosquitoes. Clean drinking water, food, shelter and medical care for injuries are of primary importance immediately after a disaster.

Because the effects of a disaster can last a long time, affected regions will need financial and material assistance for many months following a disaster. Such assistance should come in the form of surveying and monitoring for infectious and water- or insect-transmitted diseases; diverting medical supplies from non-affected areas to meet the needs of the affected regions; and restoring normal primary health services, water systems, housing and employment, among other things.

Medical professionals have a great part to play in assuring that natural disasters do not result in even worse health disasters. An essential part of any disaster preparedness program must therefore take into account the health repercussions of such an event and prepare medical and nonmedical personnel and infrastructure. This is why a discussion of the sort taking place today is so vitally important. The meeting of representatives from different parts of the Asian region allows us to network, share ideas and experience and together come up with ways to prevent and react to the health repercussions of natural disasters. We have seen the effectiveness of such teamwork in dealing with SARS, avian flu and, indeed, several of the natural disasters that have occurred in the past few years. It is my hope that many positive ideas will result from this meeting, and I am honored to be a part of it. Thank you.

Chair of Council, World Medical Association (Israel)



More than 600 people attended the lecture



A separate lecture hall with a monitor was open to the overflow audience

Crisis Management for Infectious Disease: Learn from SARS experience and prepare for the influenza pandemic (Summary)

JMAJ 50(1): 117, 2007



Takeshi KASAI*1

The SARS epidemic of 2003 sent shock waves throughout the world. In retrospect, SARS is neither highly contagious nor is the death rate extremely high. However, it threw people into anxiety and with its economic impact caused social confusion worldwide.

On March 5, the WHO Regional Office in Manila received an e-mail from Dr. Urbani of the Vietnam Office. Dr. Urbani was the first to realize this abnormality, but tragically he, too, fell victim to SARS. In crisis management for infectious disease, it is vital that abnormalities be recognized as early as possible. Without Dr. Urbani's prompt response, the world may have become embroiled in a far greater epidemic than it did.

There has also been international criticism of the Chinese Government say that, had it employed a policy of open information earlier, it would have been possible to curb the disease's spread. Control of information in an infectious disease epidemic is impossible. In the case of SARS, the disease's cause and infection route were initially unknown, but it painfully brought home the importance of those involved striving to be truthful in order to gain people's trust, admitting when they simply do not know something, instead of cowardly suppressing information.

SARS also reawakened people to the fact that infectious diseases know no national boundaries. The world is more connected than people realize. On February 21, one person infected with SARS stayed in Room 911 of a hotel in Hong Kong. As a result of that one night stay, SARS patients spread around the world—Canada, US, Singapore, Vietnam, and Hong Kong. Not only did this throw the world into uncertainty, but the need it created for countries to protect themselves from an infectious disease originating elsewhere reconfirmed the vital need for cooperation and coordination within the international community.

The world is once again threatened by a new strain of influenza. The past three new strains of influenza have all been mutated forms of avian influenza. If the disease appears again, there is a possibility that it will appear in a form that no human has antibodies to defend against and it will spread throughout the world. In other words, unlike in the case of earthquakes and typhoons, sufficient support from neighboring prefectures or the central government cannot be expected. New influenza strains will spread on a vastly different scale from that of the SARS epidemic. In addition to infectious disease countermeasures, large area disaster measures must be devised, including the provision of water, electricity, and food, but the basic principle of the importance of preparedness is the same as for earthquakes and typhoons, etc. In order to minimize damage, it is vital that we utilize the lessons we have learned from SARS and ensure that each region is as fully prepared as possible while keeping an eye on international moves.

^{*1} WHO Western Pacific Regional Office, Manila, Philippines (kasait@wpro.who.int).

Disaster Management in the Acute Phase (Summary)

JMAJ 50(1): 118, 2007



August 15 of this year (2006) was the 62nd anniversary of the end of the 2nd World War (1945). Time certainly does fly! Following the nation's defeat in the 2nd World War, Japan renounced war; democracy became established, and the country enjoyed much of the prosperity of the pre-war years.

However, in truth there were also many important things that had been established in the pre-war era that were forgotten after the war. One of the most important of these, I believe, is the concept of community solidarity and civil defense.

Prior to the war there were numerous community-based organizations such as neighborhood associations, "nearest neighbors" groups, and local women's defense groups. In times of emergency, civil defense was put in motion as people helped themselves and each other. Because of remorse over extreme actions by such groups directed by the military, including purges of anti-militarists and left-wing activists, in the course of the past 60 years, these organizations have been forgotten.

However, the devastation of the Great Hanshin-Awaji Earthquake of January 17, 1995 served as a wake-up call alerting us to the importance of rescue and disaster medicine. Disaster medicinal treatment shares many similarities with military medicine; the concept of triage—which could also be interpreted as "sacrificial medicine"—and the importance of cooperative systems with residents of the disaster area are both issues that obviously overlap with military medicine. Yasuhiro YAMAMOTO*1

in the Great Hanshin-Awaji Earthquake were rescued found that less than 20% were rescued by official rescue teams such as police or the fire brigade; it must not be forgotten that the remainder of these victims were saved through the cooperation of their neighbors and the local community.

If we consider the aftermath of an earthquake on time basis, it is vital that people save their own lives and family members save other family members on a minute-by-minute basis; and that members of the local community save other community members on an hour-by-hour basis. Without civil defense, disaster medicine is not viable.

Because the concept of civil defense has been forgotten in the postwar era, however, the reality of the situation today is that neighbors have no idea of how many people are in the household next door, how many children or other people particularly vulnerable in earthquakes the neighboring family has, or even what the neighbors' jobs are.

We have entered an era in which an attitude of "the community should protect the lives of the community by their own"—self-help and community-reliance—needs to be cultivated on the level of the general public as part of disaster preparedness in the case of emergencies such as earthquakes.

The likelihood of epicentral earthquakes in the Tokai, Tonankai, Nankai, or Kanto areas is rapidly growing.

A survey of how victims trapped under rubble

^{*1} Professor and Chairman, Department of Emergency and Critical Care Medicine, Nippon Medical School, Tokyo, Japan (yamamotoy@nms.ac.jp).

In Heartfelt Gratitude to All Those Who Made This Conference Possible....

We had very little time left to prepare for the 1st Asian-Pacific Regional Conference once it was finally decided to hold the conference in Tokyo. Moreover, autumn is a popular season for weddings in Japan, so all the potential venues were already fully booked except the Chinzan-so and Four-seasons Hotel, which fortunately accepted our reservation. International telephone conferences were repeatedly carried out in order to match the concepts envisioned by the executives taking part in this experimental 1st WMA conference in the Asian-Pacific region. Our final business meeting to confirm details was held in a room at the back of the hotel restaurant with Dr. Kloiber, Secretary General of the WMA, Dr. Coble, Chairperson of the CPW, and our staff on the afternoon of the day before the conference, while all the other rooms of the hotel seemed to be occupied by merry wedding reception guests.

Public open lectures on 10 September, 2006

On this clear day, the JMA, with the cooperation of the WMA, held special afternoon lectures on disaster medicine for members of the general public as a satellite event of the Regional Meeting. The open lectures were held in the main hall of the JMA building, but another room with TV monitors on the 3rd floor was prepared at the last minute to provide for the overflow of people attending the event; total participation was estimated at more than 600 people. Both Dr. Letlape, President of the WMA, and Dr. Blachar, Chair of the WMA Council, gave impressive opening addresses before the attentive audience. Dr. Karasawa, President of the JMA, expressed his gratitude to all the attendees in his welcome address.

The 1st day of the regional conference: 10 September, 2006

The 1st day of the conference was held as an open session with invited participants from abroad and Japan at the Chinzan-so, which features an exquisite Japanese garden, in the afternoon following the public lectures. A welcome reception was held in the evening for all the meeting participants from abroad and Japan and special guests Mr. Jiro Kawasaki, Japanese Minister of Health, Labor and Welfare, and two members of the Japanese House of Councilors, Mr. Keizo Takemi and Dr. Hidetoshi Nishijima. Sushi dishes in particular were received with enthusiasm, demonstrating sushi's international popularity.

The 2nd day of the regional conference: 11 September, 2006

The especially fruitful 2nd day of the conference was held as a closed session discussing disaster medicine. The conference room overlooked the lusciously green traditional Japanese garden on a clear day after late-night thunder and rain. In his closing address, Dr. Iwasa, Vice President of the JMA and Vice Chair of the WMA Council, referred to the eternal value of the Oath of Hippocrates and the Geneva Declaration for every doctor in every country.

It would please me greatly if all the conference participants as well as the readers of this special edition of the JMA Journal could share in this updated knowledge of disaster medicine, including responses to natural disasters and outbreaks of infectious diseases, presented at this conference and utilize this knowledge to contribute to the resolution of these global concerns as responsible doctors and medical associations in the Asian-Pacific region and throughout the world.

I would like to express my heartfelt thanks to all those whose skillful organization and presentation directed the conference to its immensely successful conclusion. Pfizer Inc. in particular greatly contributed to the financing of this conference. I am also very thankful to the IFMSA volunteers, including my son Masashi, for their devoted efforts behind the scenes, ensure to the conference preceded smoothly.

Masami ISHII, Secretary General, CMAAO. Executive Board Member, Japan Medical Association, Tokyo, Japan (jmaintl@po.med.or.jp).



Dr. ISHII (right) and his son Masashi

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Japan Printing Four Seasons Hotel Chinzan-so