



**HARVARD** SCHOOL OF PUBLIC HEALTH

# Takemi Program 30<sup>th</sup> Anniversary Symposium

November 23, 2013, Tokyo, Japan

—Japan Medical Association Auditorium—

**JAPAN MEDICAL ASSOCIATION  
HARVARD SCHOOL OF PUBLIC HEALTH**



# Takemi Program **30<sup>th</sup>** Anniversary Symposium

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## Congratulatory Message

Yoshitake YOKOKURA  
*President, Japan Medical Association*



On behalf of the Japan Medical Association (JMA), I would like to express my heartfelt congratulations on the 30th anniversary of the establishment of the Takemi Program in International Health at the Harvard School of Public Health (HSPH), which we are celebrating this year.

As you know, this program is a course bearing the name of Dr. Taro Takemi, a past-president of the JMA. Recognizing the importance above all else of nurturing capable leaders with broad global knowledge and experience in order to improve healthcare in Japan, Dr. Takemi established this program at Harvard University.

At that time, Dr. Takemi asserted based on the theme “Development and Allocation of Medical Care Resources” that it was important to resolve various domestic and international problems from the standpoint of what is now referred to as “global health.” Subsequently, the theme “Development and Allocation of Medical Care Resources” also became an eternal issue for the World Medical Association and is a broad-ranging fundamental issue that medical associations around the world continue to tackle today—one whose importance we medical professions must re-acknowledge.

I would like to offer my sincere respect and warmest congratulations to all the HSPH faculty who have Dr. Takemi’s wisdom and sustained the Takemi Program, particularly Professor Michael R. Reich, who has played a central role in the program over decades. I would also like to express my heartiest thanks to the Japan Pharmaceutical Manufacturers Association, which has supported the Takemi Program over 20 years through the provision of operating funds.

Japan is currently facing the arrival of the super-aging society and of the reality of the declining birthrate. Under these circumstances, how to best protect the health of the general public while firmly maintaining the universal health insurance system is becoming an extremely large and pressing issue. Such problems cannot be resolved from only a domestic perspective; they are problems that need to be tackled from a dynamic and international perspective.

It is also imperative that the world also seek solutions to health issues—such as transnational systems of cooperation amongst medical professions for addressing infectious diseases spreading internationally and natural disasters, etc.—from an international perspective through the true cooperation of all countries.

The JMA holds high expectations for the Takemi Program, which has the excellent performance record of producing a large number of Takemi Fellows from around the world—242 fellows from 51 countries thus far—and has over many years endeavored to enhance and expand the program content.

It is my hope that Takemi Fellows will take advantage of their experience studying under the Takemi Program—a course with a high degree of international contribution—and continue to make great leaps forward in the future. The JMA also intends to proactively provide support for activities aimed at these objectives.

With this 30th Anniversary Commemorative Symposium marking the close of one chapter and the beginning of another, I would like to conclude my congratulatory remarks by having a strong hope that the Takemi Program will continue to contribute even further to the enhancement of global health in the future.

## Congratulatory Message

Masami ISHII

*Executive Board Member, Japan Medical Association*



The Takemi Program is an interdisciplinary research program that Harvard University established in its School of Public Health (HSPH) and named after Dr. Taro Takemi, former president of the Japan Medical Association (JMA), in recognition of his ideas. Dr. Takemi pointed out the global necessity of enhancing and improving health services and the worldwide problems stemming from limited resources and he advocated the development of new, efficient health resources and the improvement of their methods of distribution.

The JMA has supported this program since its establishment, especially since 1994, from when it has selected and provided scholarships to send two Japanese fellows to take part in the program each year.

The Takemi Program 30th Anniversary Symposium held in Boston on October 11th and 12th this year is a milestone that just so happened to coincide with HSPH's 100th anniversary, and so it was positioned as part of a number of celebratory events.

I am sure that the opportunity for the Takemi Fellows who assembled again from around the world to have discussions with Professor Michael R. Reich and other Harvard community members on several topics and to verify the actual situation in the world with each other was more than a chance to catch up with old friends; it was also an invaluable opportunity to take a new step toward the program's 31st year.

I have been in a position supporting this program for eight years now, and just during that time it has not always been easy to carry out the task of providing underlying support for stable administration in the midst of social upheavals synchronized to global factors.

I am honored to be awarded the title of Honorary Takemi Fellow that was conferred on me in conjunction with this celebration, having gone through that transition, together with the members of the Japan Medical Association, including President Yoshitake Yokokura, as a symbol of Harvard University's warm thanks for the entire history of the JMA's activities.

The Program Committee established in the JMA Global Health Committee planned this celebratory event in the JMA office building so that it would become an opportunity for further project continuation in the future as well as being conducted in a form that makes activities that connect international and community health seem closer in the eyes of JMA members and the Japanese public.

I pray that it becomes an opportunity to share not only with JMA members but also with all relevant organizations and the public that the cherished wish of former JMA President Taro Takemi passes on to the next generation of national healthcare, that Japan's community health care shows firm endurance in any time of difficulty, and that it becomes the cornerstone for creatively protecting the universal health insurance coverage that supports the lives and health of the entire nation.

## Congratulatory Message

Michael R. REICH

*Director of the Takemi Program,  
Taro Takemi Professor of International Health Policy,  
Harvard School of Public Health*



Dear Friends of the Takemi Program,

It is a great pleasure for me, as Director of the Takemi Program in International Health at Harvard University, to welcome you to the 30th Anniversary Symposium for the Takemi Program. This event has been organized, in partnership with the Japan Medical Association, to help explain the Program's contributions to health in Japan and to global health. The Symposium also celebrates thirty years of the Takemi Program at Harvard and provides for a reunion of the community of Takemi Fellows.

Thirty years have passed so quickly. It seems just a short time ago that Dean Howard Hiatt, Professor David Bell, and Dr. Taro Takemi were talking about their dreams for the Takemi Program at Harvard. In these thirty years, 242 Takemi Fellows from 51 countries have participated in the program.

Many have served in leadership positions in their countries, as Minister of Health, Deans of Schools, Vice-Chancellor of Universities, Chairs of Departments, founders of civil society organizations—leading organizations and scholarship in new directions. During these three decades, 52 Takemi Fellows have participated from Japan.

These Japanese Takemi Fellows have served in leadership positions in many organizations, in government, in academics, and in healthcare, providing a strong foundation for a global health perspective throughout Japanese society.

On behalf of Harvard University I wish to express our profound appreciation to all the individuals and organizations in Japan who have supported the Takemi Program over these thirty years. The Takemi Program has become globally recognized as a unique example of US-Japanese collaboration to advance global health and promote health research and policy-making in low and middle income countries.

We appreciate all who have helped us these thirty years, and we look forward to continuing collaboration for another thirty years.

Keynote Speech

## Reflections on the Takemi Program, Past and Future<sup>\*1</sup>

JMAJ 57(1): 6-9, 2014

Michael R. REICH<sup>1</sup>

The Takemi Program in International Health was established in 1983 from the shared interests of Dr. Taro Takemi in Japan and Dr. Howard Hiatt in the United States. Each had long been concerned about the problems of promoting health and preventing disease, both in industrialized nations confronted by rising health costs and in developing countries burdened by persistent poverty. Each year since then, the Program has brought together at Harvard a small group of Takemi Fellows from around the world, to engage in a program of research and advanced training on how to improve global health. Over the past 30 years, 242 Takemi Fellows from 51 countries have participated in the program. Many Takemi Fellows have achieved leadership positions in their own countries and in international organizations.

This presentation reviews the history of the Takemi Program, the accomplishments of Takemi Fellows, and challenges for the Takemi Program's future.

### History of the Takemi Program

Dr. Taro Takemi, as President of the Japan Medical Association from 1957 for 25 years, provided the initiative to establish the Takemi Program at Harvard. During his career, Dr. Takemi emphasized the need to bring together experts from medicine, public health, economics, law, politics, and other fields to find effective and equitable solutions to the development and allocation of health care resources. Dr. Hiatt, as Dean of the Harvard School of Public Health, similarly



stressed the development of interdisciplinary approaches to the study of health problems and health policy (**Slide 1**).

In April 1981, Dr. Takemi invited Dean Hiatt to Tokyo to address a meeting of the World Medical Association on the development and allocation of medical care resources. We recently found a copy of this invitation letter in the archives of the Takemi Program. Dr. Hiatt accepted the invitation from Dr. Takemi to visit Japan. Out of their discussions in 1981 grew the idea of the Takemi Program in International Health at Harvard. To move the ideas forward, Dean Hiatt included Professor David Bell, who was Chair of the Department of Population Sciences, in a visit to Tokyo in December 1981 (shown in **Slide 2**).

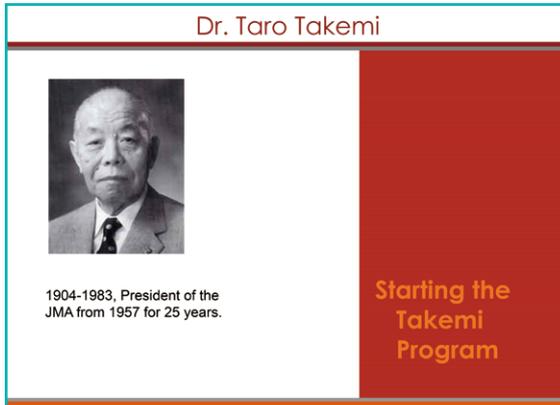
Dr. Takemi and Dean Hiatt agreed that the Program would concentrate on the problems of mobilizing, allocating, and managing scarce resources to improve health, and of designing effective strategies for disease control and prevention and health promotion, with a focus on the world's poorer countries. Each year the Program would bring together at Harvard a small group of Takemi Fellows, with an emphasis on participants from developing countries.

The Program started in July 1983, with funds

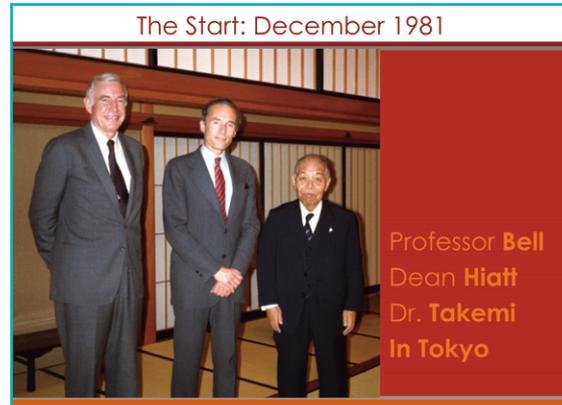
<sup>\*1</sup> This article is a revised transcript of the presentation delivered by the author at the Takemi Program 30th Anniversary Symposium, which was held at the JMA Auditorium, Tokyo, on November 23, 2013.

<sup>1</sup> Taro Takemi Professor of International Health Policy, Harvard School of Public Health, Boston, USA (reich@hsph.harvard.edu).

(Slide 1)



(Slide 2)



donated by two private companies in Japan, and was named after Dr. Taro Takemi. The funds provided for an endowed chair named after Taro Takemi, and for start-up funds for the Takemi Program. Professor Bell served as Acting Director of the Program, and I was hired as the Program's Assistant Director, to organize the Program and make it run.

In 1986, the new Dean of the Harvard School of Public Health, Dr. Harvey Fineberg, recruited Dr. Lincoln Chen as the first Taro Takemi Professor of International Health at Harvard. They visited Tokyo in the late 1980s for a Takemi Symposium on International Health, and met with Mrs. Takemi and Professor Seiji Kaya, former President of Tokyo University and chair of the Japan Committee for the Takemi Program at the time.

Throughout the Takemi Program's existence, it has received support from Keizo Takemi, as a representative of the Takemi family, and core support from the Japan Medical Association, which has become a key partner for the Takemi Program. In 1988, I was appointed Director of the Program—a position I continue to hold at present—and in 1997 I was appointed Taro Takemi Professor of International Health Policy.

### Accomplishments of the Takemi Fellows

The first group of Takemi Fellows arrived at Harvard in late summer 1984, to begin their research fellowship year at the Harvard School of Public Health. They included (from the left in **Slide 3**): Lukas Hendrata (Indonesia), Hacheong

(Slide 3)



Yeon (South Korea), Prakash Gupta (India), Hong-chang Yuan (China), and Keiji Tanaka (Japan). Their research topics remain relevant today, three decades later: effective family planning and community participation in Indonesia; economic analysis of Korea's health system; controlling the health consequences of smokeless tobacco use in India; strategies for schistosomiasis control in China; and how the fee schedule works for paying physicians in Japan.

The accomplishments of the 242 Takemi Fellows to date are impressive. Many Takemi Fellows have achieved leadership positions in their own countries, and have pushed the frontiers of knowledge and action in many fields. Let me cite just a few of these leaders in global health, to illustrate what Takemi Fellows have achieved:

- *Dr. Keiji Tanaka*, who was in the first group of Takemi Fellows and rose to a leadership position in Japan's Ministry of Health, Labour and Welfare;
- *Dr. Bong-min Yang*, who has served as Dean and Professor in the School of Public Health at Seoul National University in Korea and has pushed reforms in several fields of national health policy;
- *Dr. Nafsiah Mboi*, who currently serves as the Minister of Health for Indonesia and also Chair of the Board for the Global Fund to Fight AIDS, TB, and Malaria;
- *Dr. Uche Amazigo*, who served as Director of the African Programme on Onchocerciasis Control and received the prestigious Prince Mahidol Award in Public Health in 2012 for her work in promoting community-directed treatment for infectious diseases;
- *Dr. Ranganayakulu Bodavala*, who founded an independent non-governmental organization, called THRIVE, to produce and promote portable solar-powered LED lights for the poorest people in India, Africa, and other countries around the world.

It is also worth noting that 52 of the 242 Takemi Fellows to date have been from Japan. These Japanese participants have assumed key positions in global health in Japan, including professors in many universities and leadership roles in hospitals, global health agencies, and government agencies. They have helped to shape the field of global health in Japan over the past three decades.

One goal of the Takemi Program has been to increase participation by women as Takemi Fellows over time. There were no women in the Takemi Program until the fourth year of Fellows (1987-88), with 7 men and 1 woman.

Women did not out-number men in a single year until 1998-99 (with 4 women and 3 men). Since 2008-9, however, women have out-numbered men in 4 out of 6 years. By decade, the percentage of women has increased from 20% in the first decade, to 37% in the second decade, and to 48% in the third decade. When considered as a cumulative percentage over time, the trend is moving in the right direction, with greater representation of women as Takemi Fellows. The recent group of Takemi Fellows in 2013-14 clearly demonstrates this pattern.

(Slide 4)

Long-standing Partners in Japan




- Long-standing Partnership with the Japan Medical Association
- Annual donation from Japan Pharmaceutical Manufacturers Association for many years

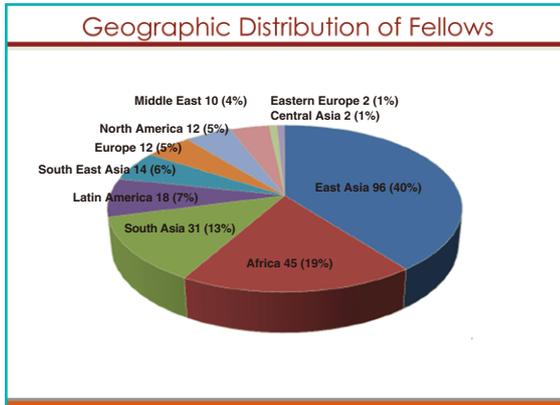
### Challenges for the Future

Many organizations have contributed to sustaining the activities of the Takemi Program at Harvard over the past 30 years. In particular, two Japanese organizations deserve special mention. The long-standing partnership with the Japan Medical Association has provided a solid foundation for the Program, reflecting the special relationship with Dr. Taro Takemi. A generous annual donation from the Japan Pharmaceutical Manufacturers Association has contributed most of the Program's annual operating expenses for many years (Slide 4).

For the past decade, most Takemi Fellows have raised their own fellowship funds, from many different sources, in order to participate in the Program. In the Program's second decade, the Carnegie Corporation of New York and the Merck Company Foundation made generous grants to the Program that provided financial support to individual Takemi Fellows from low-and-middle income countries. These contributions are greatly appreciated.

One of the challenges for future of the Takemi Program is funding to support Takemi Fellows from low-income countries. At the 30th Anniversary Symposium for the Takemi Program, held at Harvard on 11-12 October 2013, nearly 80 Takemi Fellows gathered to celebrate the event. One result of the gathering was a decision by Takemi Fellows to participate more actively in fund-raising to support the future of the Takemi Program, to contribute their own money to help finance Takemi Fellows from

(Slide 5)



low-income countries. In addition, one Takemi Fellow who works for the Ford Foundation encouraged the Program to submit a grant application to provide financial support for persons from West Africa with leadership potential in women's health and adolescent development; in February 2014 that application was approved and awarded.

The availability of funding for Takemi Fellows has influenced the geographical distribution

of participants by region, as shown in **Slide 5**. The predominance of Takemi Fellows from East Asia (40%) reflects the strong financial support from Japan and the availability of sabbatical support from Korean universities. The relatively low participation from Africa (at 19%) was supported by external grants from foundations, as noted above, during the Takemi Program's second decade. The Program hopes that future funding for low-income countries will help support the participation of Takemi Fellows from regions of the world that could especially benefit from leadership development in health.

During its three decades of activities, the Takemi Program at Harvard has evolved into a unique example of global health leadership development supported by US-Japan private cooperation to advance the welfare of developing countries. The Program especially appreciates the commitment of individual Takemi Fellows, and many individuals and important partners in Japan, at Harvard University, and in other countries around the world, who have contributed to realizing the dreams of Dr. Takemi and Dean Hiatt in the Takemi Program. We hope that continuing support will allow the Takemi Program to sustain its activities long into the future.

Session 1

## Power of Community Health in Implementing the Universal Health Insurance System in Japan<sup>\*1</sup>

JMAJ 57(1): 10-14, 2014

Masamine JIMBA<sup>1</sup>  
(Takemi Fellow 2001-02)

I was in Boston as a Takemi Fellow from 2001 to 2002. Before that, I worked in the Gaza Strip and West Bank for two years and Nepal for five years during the maoist conflict, and so I expected that I would finally be able to do some solid studying in a safe place. However, the 9.11 attack occurred a week after I arrived in Boston. Although danger seems to follow me, I was able to spend a very meaningful year there.

The topic of my talk today is universal health coverage. These days it is one of the hottest topics in global health and it is sometimes abbreviated UHC. The out-of-pocket (OOP) expenditure for health care is considered as a key indicator for UHC and it is extremely high in many developing countries. Reportedly, 150 million people suffer from financial catastrophes and 100 million are pushed into poverty due to OOP payments every year. In some of the South and South East Asian countries, on average, patients were required to pay 35% of the total health care expenditure in 2010. They are currently aiming to reduce this to 15 to 20%. Health care and poverty are closely related and UHC is an extremely important measure to fight poverty.

High healthcare costs can indeed lead to poverty, and this was also a major issue in Japan about 50 years ago. According to the Ministry of Health and Welfare's annual health report, 1.77 million people were on welfare in 1956 and disease or injury was its cause in 64.5% of those welfare cases. In those days, medical care was



also considered an extremely expensive luxury.

Globally, UHC is defined as follows: All people receiving quality health services that meet their needs without exposing them to financial hardship. This is a movement aiming at covering all people in every country with UHC systems and ensuring that paying health costs does not cause economic catastrophes.

Although UHC has been in the spotlight recently, its concept is by no means a new development. Let's look at WHO's movements since the WHO charter of 1948. Notably, the "Health for All" slogan advocated after the Declaration of Alma-Ata in 1978 has continued since then and come into the spotlight now as the realization of UHC. In Japan, a universal health insurance system was already established in 1961, and its successful outcomes, such as equity and reduction of medical costs, have been taken up in different professional journals.

Japan's universal health insurance system was even taken up in a 2011 edition of the *Lancet* as one of successful UHC cases in the world. Looking back at the chronology of UHC in Japan from 1922 to 1961, however, progress has been made by trials and errors than a series of

<sup>\*1</sup> This article is a revised transcript of the presentation delivered by the author at the Takemi Program 30th Anniversary Symposium, which was held at the JMA Auditorium, Tokyo, on November 23, 2013.

Due to space limitations, not all of the slides shown in the original presentation appear in this article.

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(Slide 1)

**In Japan**

### Challenges after UHC was started



- ◆ **No medical doctor area was not reduced**
  - Enlarged under-population areas
  - Doctors favored to go to urban area
  - People must pay for insurance but cannot find doctors
- ◆ **Tail chasing of emergency patients**
  - Specialists were not enough
  - 34,000 such cases in 1975

Shinmura T, The era of UHC in Japan, Hosei Univ Press, 2011

(Slide 2)

**From community**

### Now its time for community health

(Sugiyama A Japan Welfare Univ. Paper 114, Mar 2006)

- ◆ 1957: National Health Insurance System Revised
  - Levying of the health care cost at the time of the visit at the facilities.
- ◆ Until 1957
  - the municipal offices of Yachiho Village paid the health care facilities the incurred cost of health care until the patients paid back when they had sufficient income to do so.
  - Villagers were able to take advantage of available health care and protect their own finances.
  - The new system may decrease the number of visits by the patients, possibly resulting in delaying of diagnosis and worsening of symptoms.

**Go against the new system ! ( 1year lasted )  
Yachiho Village in Nagano (Now Sakuho v)**

evidence-based policies. Interestingly, when we focus this period of approximately 40 years from 1922, we can see that the phrase “global health” hardly appears in the scientific literature. It was not completely absent, but it certainly was not used very frequently. Also, it was not the case that Japan was initially thinking about its contribution to the rest of world when UHC was developed in Japan; it worked single-mindedly to create the system for the Japanese citizens. Yet today it is attracting attention as having global significance. Yesterday it was suggested that community health and global health are two sides of the same coin. The tireless journey taken locally for the Japanese people is globally applicable now, and the prime example is Japan’s universal health insurance system.

As UHC began to spread within Japan, there were some undesirable findings. For example, some areas continued to have no medical doctor available, and tail chasing of emergency patients took place where specialist doctors were not available (Slide 1). This was because invisible problems became visible as the nationwide system was put into practice. Problems lurking in every corner came into sight as the system was developed and then put into practice. How should we tackle this? The introduction of the UHC was highly appreciated, but it was no easy matter to make it work. This situation is similar to the Takemi Program, which faced a variety of trials after it had started, and the same went for Japan’s UHC.

To overcome such undesirable findings, the roles of community health should be more

emphasized. Let me show you an example of community actions which took place during the process of establishing the UHC in rural Japan. In 1957, the UHC was still incomplete and a new system was about to start to increase fund for its implementation. The aim of this system was to make a national policy to collect the medical expense at the time of a visit to a medical facility.

However, Yachiho Village (now Sakuho Village) in Nagano Prefecture in central Japan strongly opposed this new policy. Before, the municipal office of the village used to pay medical cost to a medical facility on behalf of patients, who would then pay back the costs when they had sufficient cash to do so. This enabled villagers to go to medical institutions when necessary without worry. But, if the medical expense were to be collected at the time of visit, the municipal office would not be able to pay expenses on patients’ behalf. In that case, villagers might not go to medical institutions unless they had an irreversibly serious illness. By having anxiety about such a possibility, Yachiho Village waged a yearlong opposition campaign (Slide 2).

However, resistance was not kept up long, and they were obliged to change their thinking (Slide 3). If the villagers thought, the collection of the medical expense was too difficult at the time of a visit, then they would try to avoid people getting sick. Thus they launched a health promotion campaign. First of all, they introduced health handbooks and health registers. The idea of using health register was used based on their

(Slide 3)

**From community**

**New way of thinking!**

- ◆ **Let's not make patients !**
  - Health promotion·disease
  - Prevention/early detection
  - Knowledge and awareness raising by performance
- ◆ **Health notebook·health handbook**
  - It used to be used for animals, but now for humans!



**1983 : This idea was introduced to a Japan's ageing health law**

(Slide 4)

**In Japan**

**Psychological tasks of the universal health insurance system of Japan**

- ◆ **Lowering of volition for self-management of health**
  - Mental disposition to easily visit hospitals/clinics, leaving his/her own health in the hand of specialists
  - Steep rise in the national healthcare expenditure  
(Shimamura T. The era of UHC in Japan, Hosei Univ Press, 2011: p.55)
- ◆ **Patients are too accustomed to convenience**
  - Sudden increase in the number of emergency patient transports
  - All residents: 3.24 million (1996) → 4.89 million (2006)
  - 65 ≥ years of age: 1.06 million (1996) → 2.20 million (2006)  
(Yamaoka J The UHC is in Danger, Heibonsha, 2011: p. 35)

**UHC Crisis**

experience of using livestock registers. At that time the village had many livestock, and a good system had been developed for checking the health of livestock, since the death of farm animals meant financial problems. And so the idea was to apply these registers for people to avoid people getting sick. This concept is not limited to Japan. When I met a specialist fighting polio in western Africa I heard that there are ethnic minorities who were hesitant to receive vaccination; however, similar to Yachiho Village, the ethnic minorities were vaccinating and managing the health of their livestock. With this information in hand, the medical personnel could say, "If you vaccinate your animals, you should also vaccinate your children." With this argument, the vaccination program went well.

After these health promotion activities, Yachiho Village could drastically reduce its healthcare costs. Data show that the village saved 200,000 yen per senior citizen in healthcare costs, or 200 million yen for a population of 1,000, as the outcome of 50 years of effort. Their community health programs also had a major impact on national policy.

It was Saku Central Hospital that supported these efforts. I am sure that most of you know about Saku Central Hospital, I would like to emphasize the efforts they made through theater and movies. Such art-based approaches created a rapport with the people and were extremely beneficial in practicing community health activities. The inspiration for these efforts came from the ideas of Kenji Miyazawa, an early twentieth-century poet and modernist. Accord-

ing to Miyazawa, one of keys to successful cultural activities in a rural community is to perform drama as an actor. Inspired by these words, Dr. Shunichi Wakatsuki, director of Saku Central Hospital, started theatrical activities and movies. Such activities are not limited to Japan; similar efforts have been made in other countries such as the UK, Australia, and South Africa. The importance of the arts in community health is suggested in a book entitled *Arts Development in Community Health: A Social Tonic*. In this way, the efforts undertaken by Dr. Wakatsuki have been similarly implemented in the world, not just in Japan.

Now let's turn our attention to the present. Japan's UHC has been maintained comparatively well thus far. Nevertheless, there are problems, such as the aging of the population. Figuring out how to resolve these problems has become a major issue. Several researchers have pointed out the psychological challenges brought about by this system. They wonder whether the spread of this system has caused a decline in awareness of the need to manage one's own health by oneself. People have come to perceive that they can leave their health issues to specialists, since health services are easily accessible. And the researchers question whether such an attitude has caused the rapid rise in the national healthcare expenditure. For example, ambulance transport has increased enormously as more and more patients become too accustomed to convenience. The number of patients who used an ambulance increased from 3.24 million in 1996 to 4.89 million in 2006. Meanwhile, patients

(Slide 5)

From community to the world

## Finally: UHC by All



◆ Who are players to achieve UHC?

- Not only health finance specialists
- Community people, local government, doctors, nurses, public health nurses, health volunteers...

Old pictures are taken from 'Health volunteer stories' [http://www.sakuhp.or.jp/yachiho/sidouin\\_back/sidouin100/sidouin16.htm](http://www.sakuhp.or.jp/yachiho/sidouin_back/sidouin100/sidouin16.htm)

aged 65 and older more than doubled, from 1.06 million to 2.20 million. Thus, the reasoning goes, soaring healthcare costs are associated with the patients who are overly accustomed to convenience. And so the challenge now is to figure out what can be done in community health to counter this trend (Slide 4).

Put another way: a community research specialist, John L. Mcknight, said this. "As the power of a system, such as Japan's UHC, grows, the power of community declines. As control magnifies, consent fades. As standardization is implemented, creativity disappears. As consumers and clients multiply, citizens lose power. To build a healthy society, we need two tools: a system and a community." It is important to strengthen systems. But, unless communities

become just as strong, a balanced society will not be created. A book has come out in Japan that addresses those kinds of questions. An English translation of the title would be something like *Toward a Society with Community Health*. It is a very useful book, and it introduces many examples of community health activities in Japan.

For example, in Kochi Prefecture there is something called "lively 100-year-old exercise." The other day I went to Ghana, where people were doing *yosakoi dance*, an energetic form of traditional Japanese dancing. Perhaps people will start doing lively 100-year-old exercise in Ghana, Thailand, and other places to get healthy. It really is a great community health action. This is something worth disseminating to the rest of the world. In that sense, it is becoming increasingly certain that community health and global health are two sides of the same coin nowadays.

Systems are important. But, it is the power of everyone together that brings a system into fruition. At the beginning of my talk, I mentioned the phrase "Health for All." Now, the important message is not "Universal Health Coverage for All" but rather "Universal Health Coverage by All" (Slide 5). Community health has a very big role to play toward that end. The members of prefectural medical associations involved in the realization of community health will make a big mark in the future. I hope that you will all do your best with the thought that someday what you are doing now will be accepted throughout the world.

### Comment



Akira AKAGAMI<sup>2</sup>

Dr. Jimba's talk noted the need for both top-down and bottom-up policy approaches when

establishing a community health and medical system in developing countries. He used the example of initiatives by Yachiho Village in Nagano Prefecture during the creation of Japan's universal health insurance system to highlight the importance of the role of bottom-up approaches. I felt that the talk was very instructive, considering the various problems faced by the current universal health insurance system.

<sup>2</sup> Tokyo Medical Association, Tokyo, Japan. Member of the JMA Global Health Committee.

Within the social milieu in Japan, which has a rapidly graying population with a declining birth rate, an important role of community health will be to establish comprehensive community-care systems appropriate to the special characteristics of each community.

I would like to take this opportunity to introduce initiatives of local medical associations in regards to 1) emergency geriatric care and 2) 24-hour at-home care systems.

1) Emergency geriatric care: I live in the Hachioji City in Tokyo. Emergency transport of elderly patients has been increasing with the aging of the population. Dr. Jimba mentioned that patients are sometimes refused because of lack of space at medical institutions, and it is becoming increasingly difficult to find hospitals to transport patients to. In Hachioji, the Hachioji Geriatric Emergency Medical System Network was launched and an Emergency Medical Information Form (Fig. 1) created as a measure to establish a reliable and safe emergency transport system to handle the emergency requests of senior citizens. The participating institutions are emergency hospitals, psychiatric hospitals, geriatric facilities, nursing care companies, the fire department, Hachioji City, and the medical association. The special feature of this Emergency Medical Information Form is that it includes, in addition to the general medical information, check boxes for items that the patient would like to communicate to the doctor just in case, such as: "I want lifesaving and life-support measures taken as much as possible," "I want measures taken if they will ease pain," and "I want to be watched over in as natural a condition as possible." This form is for senior citizens aged 65 and older, and I think that it is important for older persons to talk in advance with their families about the kind of end-of-life care they would like to have.

2) 24-hour at-home care systems: Last year the Tokyo Metropolitan Government commissioned the Tokyo Medical Association to create an at-home mutual assistance system. The Hachioji Medical Association took over this project and is studying the establishment of an at-home care

system to assist member physicians.

With respect to at-home care, many physicians tend to be hesitant about home visit care for reasons such as they are too busy with outpatients to do home visit care or that it is difficult to respond on weekends, at night, or while traveling. So, we are considering three-way cooperation among primary care physicians, visiting nursing stations, and enhanced at-home assistance clinics.

The first step is to set up visits from a 24-hour visiting nursing station to the patient who will receive at-home care. This puts medical information such as visit instructions and visit nursing records in the station. The second step (Fig. 3) is to have a system for handling emergency house call requests at times when the patient's primary care doctor is not working, such as on days off, at night, or while traveling. As the first call, the visiting nursing station contacts the primary care doctor. If the primary care doctor cannot respond, a second call is made, this time to an enhanced at-home assistance clinic (on a rotating system), and the assistance clinic on duty will respond. The progress is then reported to the primary care doctor the following day. Future challenges will be to deepen cooperation between the government and logistical support hospitals, to develop safe IT for sharing information, and to conduct publicity so that more doctors can participate in at-home care.

Lastly, Figure 4 shows the medical association perspective for establishing comprehensive community-care systems. President Nonaka of the Tokyo Medical Association prepared this figure. The Tokyo Medical Association has expressed its active support for the creation of a medical provision system and comprehensive community care through the cooperation of local medical associations and multi-occupation organizations, for the benefit of people who live in the community. The elevation of bottom-up policies is critical for medical initiatives from the perspective of residents, from local medical associations to the Tokyo Medical Association and then up to the Japan Medical Association: the local medical associations can play such important roles.

Session 2

## Disaster Medicine From International Health Perspective\*<sup>1</sup>

### —The Takemi Program as the origin of the Japan Medical Association Team—

JMAJ 57(1): 15-18, 2014

Takashi NAGATA<sup>1</sup>  
(*Takemi Fellow 2004-05, 2005-06*)

Today I would like to talk about Japan's disaster medicine from a global health perspective. The term "disaster medicine" covers mass casualty incidents, in which many people are injured by a disaster or an accident, and triage and trauma care are of primary importance. Based on the experience of the Great East Japan Earthquake, three H's are believed to be important in disaster medicine, especially when considering large-scale disasters in Japan. The first H stands for public health, the second, for community health, and the third, for global health. I believe that these three H's will be important in understanding Japan's disaster medicine for the future.

First, I would like to talk about how I grew up and what I learned from the Takemi Program. I was born in 1970 and my father was sent as a company engineer to Nicaragua in the Central America from 1970 to 76. This is a photo of my early childhood spent in Nicaragua, and I became a disaster victim there. A large earthquake struck Nicaragua in 1972. My home was in Managua, the capital of the country, and the earthquake killed more than 6,000 people. At that time, there were only three Japanese families there: the ambassador's family, the third secretary's family, and my family. When a large disaster occurs in a poor country such as Nicaragua, public safety is not secured; order breaks down



quickly and the situation becomes quite dangerous. Therefore, the ambassador decided to leave the country immediately. The three Japanese families were packed into two small taxis arranged by the ambassador and fled to the Nicaragua-Costa Rica border after a 20-hour journey, and thus I survived the disaster. This destined me for a career involving disasters. Later, I enjoyed the life of a normal medical student, but driven by a spirit of adventure in my late twenties, I joined the medical mission in Pakistan and Afghanistan four times with the support of Peshawar-kai, a renowned medical NGO located in Fukuoka Prefecture.

This photo from 2000 shows me instructing an Afghani doctor how to perform a lumbar puncture (**Slide 1**). Afghanistan was going through a severe drought at that time and the Taliban was in control, but luckily we managed to enter the country, only to find that drought had shattered the community.

The Taliban is an issue in Afghanistan. Tali-

\*<sup>1</sup> This article is a revised transcript of the presentation delivered by the author at the Takemi Program 30th Anniversary Symposium, which was held at the JMA Auditorium, Tokyo, on November 23, 2013.

Due to space limitations, not all of the slides shown in the original presentation appear in this article.

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(Slide 1)



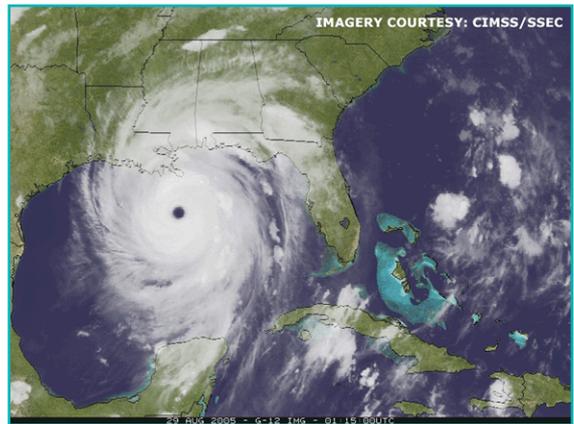
(Slide 2)



(Slide 3)



(Slide 4)



ban members wear black turbans and have a negative image for many people. What I actually saw was Taliban members engaged in public affairs like public servants. They were serving in a broad range of positions from military men to politicians, local government personnel, local elder council members, and religious leaders. I witnessed them working hard to restore the community based on old religious ways in a country devastated by war, inner conflict, and drought. In this extreme situation, the Taliban and local residents cooperated to dig wells and collaborated for irrigation works (Slide 2).

I witnessed irrigation works going well, wheat growing, and communities recovering. However, this reality was beyond me when I was in my early thirties. I lost confidence and eventually returned to normal life as a physician in Japan.

Later I had the opportunity to study on the

Takemi Program at the recommendation of Dr. Hokuto Hoshi of Fukushima Prefecture, who is here today. I studied many things through the program. Additionally, I made wonderful friends.

This picture shows Stephanie Rosborough, now Stephanie Kayden, an emergency physician at Brigham and Women's Hospital in Boston (Slide 3). She has a connection with the Japan Medical Association and is the boss of Dr. Maya Arii (who is also here today), who undertook operations to deliver drugs during the Great East Japan Earthquake using a carrier plane provided by the US military. Dr. Kayden also offered help to Japan immediately after the earthquake. She has been a friend since my time in Boston, and I have felt that having a connection with her really could be of tremendous benefit for Japan.

Another important topic during my stay in the US was Hurricane Katrina in 2005 (Slide 4).

(Slide 5)



The hurricane itself was not that big, but the large city of New Orleans was submerged under water after the hurricane passed, resulting in the breakdown of city functions. This is similar to the disasters in Japan, isn't it? Here, people who could not stay in a nursing home were collected onto a military carrier plane for evacuation (Slide 5).

Some patients who came from healthcare facilities were stretchered out like this and transported in military planes like this. I heard that unfortunately some people died while waiting. After I came back to Japan, I showed these photos to some people engaged in emergency medicine in Japan and the leaders of Japan's disaster medical assistance team or DMAT. I wanted to share my shock at the fact that a highly developed country such as the United States could do no better than developing countries in responding to a disaster. However, Japan's DMAT related people showed no interest, and I was really disappointed. After this homecoming in 2006, I joined the Japan Medical Association Research Institute and became a member of JMA's Emergency and Disaster Medicine Management Committee, through which I was involved in planning the Japan Medical Association Team or JMAT. I was invited to the JMAT plan when it started in 2010. At that time, I applied what I had learned at Harvard and what I saw personally. In the JMAT planning, we collected various reports from local medical associations describing their medical responses to various disasters that had occurred in Japan. The biggest was the Great

Hanshin Earthquake of 1995. We read the reports carefully, and found that local medical associations were the cores for a wide range of actions. We developed a concept of the JMAT activities based on the strong belief that local medical associations could be the cores for disaster response across the country. Now I would like to show a one-minute video about JMAT's actual operations in 2011.

**(Video shown about JMAT operations in Fukushima Prefecture)**

**Narration:** Because of social fear against radiation exposure after 3.11, drugs in addition to food, water, basic supplies, and gasoline were not delivered to the people of Iwaki City from outside. The doctors sent by prefecture medical associations from across Japan solved this critical situation. They visited evacuation shelters, examined and treated the survivors, and thereby helped communities get over the worst. At present (about one month after 3.11), as many as 80% of local medical institutions have resumed their medical services and are sustaining local healthcare while struggling with the difficulties of misconceptions and misinformation about radiation exposure.

This is the last slide. It shows the frequency of disasters over time. The blue line indicates disasters associated with climate change. The red line indicates economic loss. Compared to the 1980s, there were three times as many disasters related to global warming in the 2000s. The resultant economic effects are also increasing enormously. Now and in the future, disaster preparedness should become the core of medicine, and the idea of the three H's is the key component. We must understand disaster medicine based on the ideas of public health, community health, and global health.

As a practicing emergency physician and as a former Takemi Fellow, I want to do my best to stand at the frontline of medical care in Japan. Lastly, I would like to take this opportunity to express my appreciation for many people involved, including the Japan Medical Association, which readily sent me to the US, and Harvard University, which hospitably accepted me, as well as the members of the Japan Pharmaceutical Manufacturers Association. Thank you.

## Comment

Sho HASHIMOTO<sup>2</sup>

I would like to say something related to Dr. Nagata's talk that is also related to the earthquake that struck two years and eight months ago.

First, I will show a video of the tsunami. I am sure that some of you have seen this, but I would like you to watch it again and remember the horror of the tsunami. Miyagi and Iwate Prefectures have still not recovered from this tsunami disaster. Miserable conditions are still ongoing, and reconstruction, including healthcare, needs to be hastened much faster from now on.

This is the city of Miyako in Iwate Prefecture. I often went to perform surgery at this hospital, and so this image gave me a real shock. This is the city of Kesenuma. At first, the water comes gradually, but then it rushes in, destroying the buildings in town as it goes. Whether we are talking about Kesenuma, Minamisanriku, or Ishinomaki, no place that was hit by the tsunami has been reconstructed yet. Healthcare has not been restored at all. Even if the physicians return, there are no residents to treat.

You can get a sense of the height of the tsunami from the photo on the right. The upper left photo shows the public hospital in the town of Minamisanriku, and you can see that it was submerged up to the fourth floor. This is a view of Minamisanriku from above. This situation has hardly changed at all until now. On the right is Sendai Airport in the city of Natori, Miyagi Prefecture. This airport was hit by the tsunami

on March 11, but thanks to the cooperation of the US military and the Japan Self Defense Forces, the runways were usable again on the 14th or 15th. Dr. Arii, who was just mentioned, made all kinds of efforts, got the cooperation of the Harvard Humanitarian Initiative, and came in a US military aircraft loaded with medical supplies arranged by the Japan Medical Association. On the left is a US military C130 transport plane. On the right you can see Mr. Goto, a US military coordinator in the Ground Self-Defense Force and me. This person was an ophthalmologist. And there is President Kakazu (then-Vice President) of Miyagi Prefecture Medical Association. Led by then-President Ito, the drugs that came on this plane were delivered to pharmacies. Here is an evacuation shelter from that time. This is right after the disaster, and as the first few months went by, everyone continued to do their best with the intention of maintaining privacy as best they could in this way. There were 80,000 evacuees, and the total financial damage was said to be 17 trillion yen or about 170 billion US dollars.

In this situation, the JMAT turned out to be the most helpful. One after another JMAT teams would arrive at a location and stay for three or four days each. And since they always came from the same prefecture, they did a really important job in an efficient manner, looking after the community practically without the need for handover procedures each time the teams changed. As Dr. Nagata just mentioned in his talk, the JMAT was created out of the Takemi Program, and that has been extremely beneficial. I had no idea where the DMAT teams went and what they were doing, but the JMAT were very much disciplined and everything they did was on the dot. Thank you.

<sup>2</sup> Miyagi Medical Association, Miyagi, Japan. Member of the JMA Global Health Committee.

Session 3

## Maternal and Child Health\*<sup>1</sup>

### —Work together and learn together for maternal and child health handbook—

JMAJ 57(1): 19-23, 2014

Yasuhide NAKAMURA<sup>1</sup>  
(Takemi Fellow 1996-97)

It was quite a while ago that I studied in Boston as a Takemi Fellow, but the days I spent in the scholarship program still remain one of the most exciting and fruitful periods of my life. It was a year in which I encountered many different people, learned a lot, and came to realize many things that I hadn't noticed before. The participants of the program included a number of brilliant people from all over the world, who are now working in influential roles such as professors in Thailand, Korea, and Brazil. Through daily interactions with them, I found that they wanted to learn about Japan during the era when it was a developing country. They wanted me to share about the process of how Japan achieved a healthcare wonder. I didn't have the answers at that time, and through my discussions with these colleagues, I learned that Japan should be more aware of the value of its past achievements.

One thing that I came to appreciate in the course of these discussions was the magnificent decrease in Japan's infant mortality rate (**Slide 1**). Today, the world is striving to attain the UN Millennium Development Goal of reducing by two-thirds the child mortality rate over a 25-year period. Although countries are working towards this goal with the target year of 2015, many are frustrated by the slow progress. Japan reduced its infant mortality rate at twice that speed, cutting it down to one-sixth in 25 years, and this



incredible achievement was based on the country's own initiative. At present, the average life expectancy at birth for females in Japan is 86.4 years, which is a surprisingly long life expectancy for anyone in the world. Everyone wants to know how this was achieved, and I feel that we need to understand and fully appreciate the value of this process.

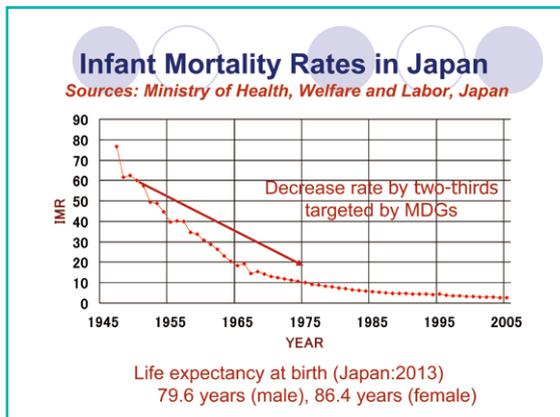
This slide shows a comparison of the infant mortality rates in Japan and the US (**Slide 2**). The infant mortality rate in Japan declined rapidly after the end of the chaotic period following World War II, falling below that of the US in 1964, which just so happened to be the year of the Tokyo Olympics. Japan was still a developing country then. Although Japan developed the bullet train, it had to take a loan from the World Bank to do so. Despite this dependence on international assistance, Japan recorded a mortality rate lower than that of the US. What enabled this achievement? Japan's health indicators went up before the country developed economically, and this fact aroused considerable interest among American researchers. I conducted joint research

\*<sup>1</sup> This article is a revised transcript of the presentation delivered by the author at the Takemi Program 30th Anniversary Symposium, which was held at the JMA Auditorium, Tokyo, on November 23, 2013.

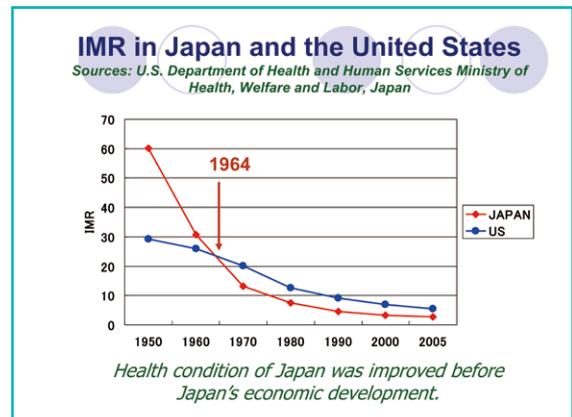
Due to space limitations, not all of the slides shown in the original presentation appear in this article.

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(Slide 1)



(Slide 2)



with the team of Professor Wallace, who is an expert in maternal and child health, at the University of San Diego, as well as Dr. Hirayama and his colleagues at the Japan Child and Family Research Institute. We arrived at five reasons for Japan's low infant mortality rate.

Among others, the second reason is universal health insurance coverage. The fourth reason is health checkups for expectant and nursing mothers and for babies and toddlers. The first reason is a narrow socio-economic gap. The fifth reason is the high social value placed on raising children. Because this study was conducted in the 1990s, there is some question as to whether these explanations still hold for Japan perfectly today. However, what we listed as the third reason—the maternal and child health handbook (MCH handbook)—was used then and is still used today.

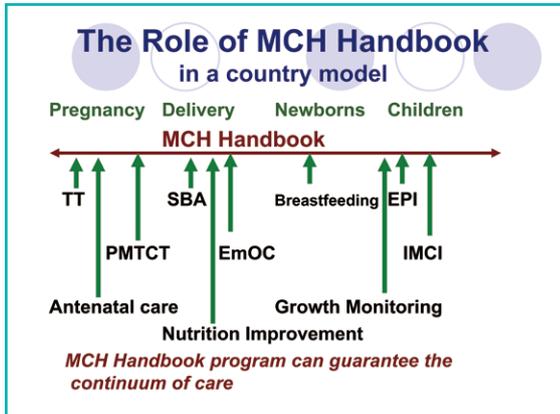
The MCH handbook is a record of prenatal checkups, delivery, child development, and vaccinations. One feature of the handbook is that it treats maternal and child health as one. Another feature is that the parent keeps the handbook. Under the Maternal and Child Health Act, the handbook is provided for free to expectant mothers who submit a notice of pregnancy to the government. The handbook is divided into pages that are the same nationwide, as prescribed by the Ministry of Health, Labour and Welfare, and other pages.

Today, MCH handbooks are used in over 30 countries, but only in Japan the book was handed out to a pregnant woman upon submission of a notice of pregnancy to the government (Slide 3).

(Slide 3)

This practice in Japan startles people in other countries, who would observe; “Do you really notify the government of such a private thing as pregnancy?” This has made me feel that the Japanese, who have continued to notify the government of pregnancies, have special attitude in this regard. MCH handbooks originated in Japan. Handbooks for expectant and nursing mothers were distributed with a food ration handbook during the war in 1942. Thereafter, Japan created the world's first MCH handbooks in 1948 in a way separately from but based on their predecessors. It was the first time in the world that a maternal handbook, pregnancy and delivery handbook, and child's handbook had been combined. Seventeen years later, “maternal and child handbooks” were legislated in Japan under the Maternal and Child Health Act. Later

(Slide 4)



(Slide 5)



they were renamed “maternal and child health handbooks.”

Let us consider the role of this handbook from a global health standpoint. It is clear that the handbook is not merely a pocket notebook (Slide 4). OB/GYNs or midwives conduct pre-natal checkups. After the delivery, the midwife or a public health nurse conducts a newborn visit to the family’s home. Infant checkups and vaccinations are conducted at a health clinic. Throughout the process of pregnancy and delivery, many different specialists are involved at different locations and different times in a continuous flow of events leading to the birth of a child. The question of how to ensure continuity across these different medical services is a major issue not only in developing countries but also in developed countries. In this respect, Japan has used MCH handbooks for the past 60 years to ensure a continuum of care by enabling the entire train of medical events from pregnancy to be grasped.

Now, realizing the usefulness of this tool, different countries are starting to introduce MCH handbook initiatives. Already more than 30 countries have started initiatives and the International Conference on MCH handbooks was held in Nairobi in October 2012. Dr. Kiyoshi Kurokawa and Kenya’s Minister of Health attended the conference. This slide shows the Kenyan MCH handbook. It was created by a Kenyan pediatrician who studied at Tokyo Women’s Medical University and is very familiar with Japan’s MCH handbook. That physician said that the MCH handbook is the best tool for providing a continuum of care for mothers and

children in Kenya, including fighting AIDS. Three hundred people from 25 countries, including African countries that have developed or envisage introducing MCH handbooks, gathered together for discussion.

The various MCH handbooks that have been developed in different countries are really interesting (Slide 5). They have been adopted not only in developing countries but also in developed countries. Utah in the US designed maternal and child handbooks as a keepsake to be passed on from mother to child. The person in charge of the program said that the state had copied Japan’s MCH handbooks. Fathers appear on the covers of Indonesia’s MCH handbooks.

In this context, an important element of any international cooperation is “Lessons Without Borders.” When the Great East Japan Earthquake hit, Japan instantly turned from an assistance donor to an assistance recipient. In Sudan, which I visit often, high school students created a Great East Japan Earthquake Special Week, during which they made friends, raised money, and donated it to the embassy. They worked hard for a week to collect money for the people afflicted by the disaster. These efforts are really appreciated. I felt that in return, instead of interacting from the *donor-recipient* standpoint, we should develop relationships of mutual learning and cooperation among all the countries involved. The experience of developing countries regarding MCH handbooks has also been used for the improvement of Japan’s MCH handbooks. Japan’s Health Ministry conducted a study on MCH handbooks making use of a ques-

tionnaire developed in Indonesia. Color-printed pages were added for the first time to Japanese MCH handbooks with a revision in April 2012, following the examples of developing countries using color-printed handbooks. In response to the question from a developing country asking whom MCH handbooks belong to, Japan wrote in the handbooks for the first time, “It is meaningful for you as parents to give the handbook to your child when he or she becomes an adult.” We have reached a time when we can learn from each other in this way.

For your information, the 9th International Conference on MCH handbooks will be held in 2014 in Cameroon, which was the first country in the world to make a bilingual MCH handbook in English and French.

What I learned through my efforts to spread MCH handbooks outside Japan are the prob-

lems in Japan. Dr. Miriam Were (past Dean of the Faculty of Medicine at the University of Nairobi and Director of the United Nations Population Fund office in Ethiopia) has said that MCH handbooks are a miracle. We Japanese have come to take MCH handbooks for granted so much that we don’t even realize what a blessing they are. People in Africa, on the other hand, say that Japan is a wonderful country because it has these amazing MCH handbooks. We need to take more notice of the high value of MCH handbooks. JMA physicians gathered here today should make an effort to improve MCH handbooks within our communities, adapting them to community circumstances and needs, for the benefit of the children who will take over Japan’s future. That is what I learned in working with people from developing countries.

#### Comment



Shigehito ISHIGURO<sup>2</sup>

For us pediatricians, the maternal and child health handbook is an extremely important source of information for learning about the relationship between a mother and her child. They have been improved successively for ease of use, especially with the addition of information on management of the mother’s body, check-ups after delivery, and vaccinations, as well as the revision after each amendment to vaccination and other programs. In the past, I was involved in revising the maternal and child health handbook. After hearing today’s speech, I agree with Dr. Nakamura that a maternal and child health handbook should be considered a special gift that carries a message from the mother to her child. A mother can write down her worries, joys, expectations, and many other

feelings when they occur while raising her child and, as Dr. Nakamura said, give it to the child. I would like people to know that this kind of maternal and child health handbook, in addition to being a gift filled with parental love, contains extremely important information connected to health over an individual’s entire lifespan, including school health, community health, and developmental health. I hope that maternal and child health handbooks will evolve so that the information in them may be used even after the child reaches adulthood.

There are eight United Nations Millennium Development Goals, the 4th and the 5th of which are related to maternal and child health. Goal number 4 is to reduce child mortality. Shortly after World War II, the infant mortality rate in Japan was 78 or 80 per 1,000 births, but today it is around 2.3 in Japan, which now has the lowest child mortality rate in the world. In the developing world, on the other hand, many countries are tracking numbers like those seen in Japan following the war at around 80, while there are some countries, especially in

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sub-Saharan Africa, with numbers as high as 157.

As for the 5th UN Millennium Development Goal—to improve maternal health—the developing world has the inconceivably high number of 480 delivery-related deaths per 100,000 pregnancies. Making use of maternal and child health handbooks in countries such as these would be very important.

In particular, three conditions are necessary to derive the full value of the handbooks. The

first is to raise the national literacy rate, especially the literacy rate of women. The second is to improve knowledge of public health. Lastly, the most important thing is to create countries where children can be born and raised with peace of mind—that is, create peaceful societies that are free of conflict. This is the most important thing for a country that uses maternal and child health handbooks.

Session 4

## What Has Made Japan Healthy?<sup>\*1</sup> —Contributions of local and governmental health policies—

JMAJ 57(1): 24-27, 2014

Naoki KONDO<sup>1</sup>  
(Takemi Fellow 2006-07)

I was a Takemi Fellow in 2006-2007 and subsequently remained at Harvard University under another fellowship for nearly two years. The Takemi Program has determined the direction of my work for many years.

My opinion is similar to that of Dr. Jimba and Dr. Nakamura. The health of the Japanese people has been built by the marvelous national policy of universal health coverage and its embodiment in community medicine. This presentation explains, using available data, the factors behind Japan's achievement of excellent health following the realization of universal health coverage.

Japanese women nowadays have the longest healthy life expectancy in the world. This status was achieved in the late 1980s marking major improvement from the early post-World War II era, when Japanese women had a life expectancy of only 55 years. In this process of rapid progress, Japan overtook leading countries in the world, and has been the top runner ever since it attained this position. Japanese men have also been showing similar trends.

How has this been possible? This leads us to question what determines health. Although there are known risk factors related to genetics and aging, it has been shown that there are no special genes conferring long life on the Japanese. The next thing to consider is the difference in lifestyle factors, such as eating, exercise, and smoking. These, in turn, are affected by “upstream” social factors, such as poverty, living



environment, and human connections. At a further upstream level, all these factors are regulated by national policies including universal health coverage. The area of my work relates to the extent to which these kinds of social factors affect health. What, as a practical matter, has made the Japanese so healthy? Using objective data to the extent possible, I will describe the transitions in health status in postwar Japan, dividing the period into three phases. Thereafter, I will try to answer the questions: what health challenges are we facing today and how should we resolve those challenges (**Slide 1**)?

Postwar reconstruction and rapid economic growth began around 1950. This was also the time when so-called mammoth housing complexes started to appear across the country. Japan enacted many health-related laws in this period. For example, the government promoted preventive strategies such as spreading the use of X-ray exams. Tuberculosis treatment became free in 1951 and universal health coverage was achieved in 1961. However, a system does not work just because it is there. Community residents, physicians, and healthcare personnel

<sup>\*1</sup> This article is a revised transcript of the presentation delivered by the author at the Takemi Program 30th Anniversary Symposium, which was held at the JMA Auditorium, Tokyo, on November 23, 2013.

Due to space limitations, not all of the slides shown in the original presentation appear in this article.

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(Slide 1)

### What were the reasons that have made Japan healthy?

**Potential upstream factors**  
(eg, Marmot & Davey Smith, 1989)

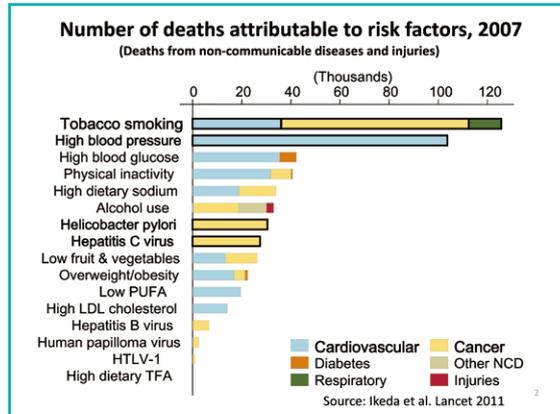
- **Health systems**
  - Universal care
  - Public health measures
- **Macro socioeconomic factors**
  - Strong economy (1960s-1980s)
  - Secure employment
  - Equal educational opportunity
- **Cultural / societal**
  - Good diet
  - Small social disparities
  - Attitudes toward sanitary behavior
  - Ways to interact with others
  - Strong social ties



TERAKOYA – popular informal school in 18-19<sup>th</sup> century. School attendance rate was estimated to be 70-86% in 1850 (Yakuwa, 2003)

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(Slide 2)



worked together as bearers of the new system, supporting initiatives such as health checkups. This resulted, for example, in the rapid rise of women giving birth in hospitals and midwifery centers, and the hygienic environment also improved considerably. What prominently contributed to the growth in life expectancy during this period was the reduction in mortality from tuberculosis among adults. Analysis has shown that this increased the life expectancy of women by two or more years. The reduction in infant mortality from infectious diseases also added two to three years onto life expectancy. The same trends were also seen in men.

From 1965 onward, rapid economic growth continued and medical costs increased. After a certain degree of success was achieved in infectious disease control, chronic diseases emerged as a major problem in this period. Particularly in the case of Japan, death from stroke in association with salty food was a very serious problem that was pushing medical costs up. The policy the national government took in response was to expand insurance coverage to preventive medications such as antihypertensive drugs. That enabled doctors to provide preventive care. Furthermore, residents, physicians, and public health center personnel have joined hands and continued to conduct health education and awareness building to restrict salt intake. Health check-ups were also made compulsory. As a result, the incidence of stroke declined at a surprising speed from 1965 forward, nearly reaching the same level as developed countries. In relation to life span, the decrease in mortality from

stroke in adults (aged 15 and older) added four to five years onto life expectancy. Similar results were also seen in men.

What I want to emphasize here is that while disease incidence rates clearly decreased with the development of legislation, this achievement depended on human resources in the community. Were it not for well-established fundamental community health services that embraced the national system, Japanese people would not have achieved long life expectancies. In other words, communities in the country had what they needed for success. In this way, improvement of health was achieved through the ideal combination of top-down and bottom-up approaches.

From the 1980s onward, the life expectancy in Japan has retained the top position in the world and still continued to increase despite the pressing need to curb healthcare cost in the time of hardship. This persistent trend may also be attributable to the historical development of fundamental community health services.

Lastly, let us consider current health policy issues. With respect to direct risks, smoking and hypertension are the most important risk factors raising mortality (**Slide 2**). It is estimated that overcoming smoking and hypertension would reduce Japanese mortality by more than 200,000 people per year. The aging of the population and the prevention of the need for nursing care are problems that must also be considered when aiming to resolve these issues (**Slides 3, 4**). Moreover, there is the problem of so-called health disparities, which has become a concern in recent years. Because Japan's social security

(Slide 3)

### Current population health challenges in Japan

- Society aging, and long-term care prevention
- Concerns for health disparities
- Social exclusion and the limitations of existing safety net: precarious work, single-parent household, social isolation

Wado et al. BMJ 2012

Need to monitor and visualize the problems

(Slide 4)

### Summary: What has made Japan healthy?

Period	Primary Contributing Disease	Potential major contributing factors
Post war - 1965	Tuberculosis and other infectious diseases	Improved hygiene due to public health activities and economic growth
1965-1980	Cerebrovascular disease (among adults)	Hypertension control and reduced salt intake due to success in multiple strategies
1980-present	Cerebrovascular and Ischemic heart diseases (among older adults)	Maintenance of egalitarian healthcare systems by multiple reforms

system, including universal health coverage, is designed on the premise that the household is the basic unit of society, it is no longer able to subsume all members of society well, as a result of the diversification of lifestyles. Nowadays, there are people who do not fit perfectly into the system. Examples include single-parent households, the problem of non-regular employment, and young adult men who are isolated from local society. A challenge from here on will be to establish new safety nets that can accommodate the diversification of lifestyles.

Last year the Ministry of Health, Labour and Welfare raised the *reduction of health disparities* as a goal of the second Healthy Japan 21 campaign. Now we need to consider how we can actually achieve that goal.

As seen above, there are many challenges. If we were to resolve these challenges, it would mean healthier and longer lives for the Japanese people. It has been calculated that resolving smoking and metabolic risk factors could add another three or more years to life expectancy. In what kind of people within society do these risk factors accumulate? Who should be the targets for countermeasures? We need to answer

(Slide 5)

### Japanese could live even longer

- by tackling high-priority risks: smoking, hypertension, other metabolic risks, and carcinogenic infections
  - Life expectancy could extend:
    - 1.8 years, if no one smoke,
    - 1.4 years, if metabolic syndrome eliminated.
- Need to respond to new problems
  - Major reforms needed to make the systems sustainable
  - Strengthening monitoring systems on health and health disparities

these questions (Slide 5).

We therefore have to promote transparency. More specifically, we need to make the most effective use of the existing data to build an information base for deciding who is at risk and who should be prioritized in the allocation of limited resources. This kind of persistent reform will be integral to the perpetuation of an equitable public healthcare system, which is the pride of Japan.

## Comment

Yoshihiko KUBOTA<sup>2</sup>

I would like to comment based on things I feel in the course of my everyday practice. We just heard from Dr. Kondo that the universal health coverage system allows equal access to medical care and that medical progress has made Japan into a country where the people enjoy high rates of longevity. However, there is also a tendency for physicians to concentrate in hospitals in big cities that have advanced medical technology and equipment. In particular, the shortage of doctors in rural hospitals is a problem. The shortage of doctors in Yamanashi Prefecture where I live, especially in the remote areas, is very serious. Under the new post-graduate clinical internship system, young interns leave for more attractive hospitals outside the prefecture, causing a loss of young physicians. The University of Yamanashi cannot dispatch physicians to local hospitals, and so no one is sent to work with us physicians at remote hospitals. I feel that these medical disparities are getting worse, since in actuality people cannot receive the medical care that they need. Local physicians such as me, serving as family doctors, are also getting older now. We doctors in private practice also have to handle emergency cases, and so I feel that it would be good if the Japan Medical Association were to dispatch physicians and provide support.

I live in Minamikoma, a mountainous area in

Yamanashi Prefecture. I would like to speak about an initiative in which our medical association is engaged. The aging of society is occurring throughout the country. As of April 1, 2013, the percentage of senior citizens aged 65 and older was 24.7% nationwide and 25.7% in Yamanashi Prefecture. In Minamikoma County where I live, it is very high at 34.8%. This situation would be fine so long as elderly people were in good health, but the number of elderly people living alone at home, confined to bed, or living with dementia is increasing year by year. In response, the medical association in Minamikoma launched the Kyonan Area At-Home Medical Care Assistance Center with the cooperation of hospital doctors and doctors in private practice with the aim of supporting healthcare. When a person comes to need at-home care, we assign an attending physician or a deputy attending physician and cooperating physicians in different specialties. We also make arrangements such as searching for a most appropriate hospital when a patient needs to be hospitalized. Now we are studying of adopting an IT-based health management system that will enable the sharing of information with dentists, nurses, pharmacists, care managers, and helpers. We have started preparatory work, and are considering of sharing information on individuals with everyone in this way.

If Japan is to maintain its position as a country of good health and longevity in the future, we must ensure that specialists are able to keep track of the condition of every person and provide finely tuned medical care.

<sup>2</sup> Yamanashi Medical Association, Yamanashi, Japan. Member of the JMA Global Health Committee.

Session 5

## Post-2015 Contemporary Issues\*<sup>1</sup>

### —The example of obesity—

JMAJ 57(1): 28-31, 2014

Taro YAMAMOTO<sup>1</sup>  
(Takemi Fellow 2002-03)

In this presentation, I would like to share with you a view of the health issues in the near future after 2015. What kind of society and what types of problems are going to confront us?

First, I will talk about the Millennium Development Goals, which were mentioned by previous speakers. There are three health-related goals with the target year of 2015. Furthermore, it was agreed at Rio+20 to establish major sustainable development goals that are universally applicable to all countries from 2015 onward. Sustainable development means development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

This slide shows a view of the world we live in today (**Slide 1**). In 2000, the year the Millennium Development Goals were established, we were facing acute problems needing urgent responses: civil wars, famines, debt crisis, north-south disparity, AIDS, etc. Now, 15 years later, while we still have a north-south disparity, we seem to have entered a period where the entire world needs to address more chronic or structured problems such as disparities within countries, youth unemployment, the frequent occurrence of disasters associated with climate change, the aging of society, and chronic diseases.

In that context, here we are looking into obesity, which is a chronic condition. The present situation of obesity in the world is as follows. Of the population aged 20 and older, more than 1.4 billion people are overweight, and of these



people, 200 million men and 300 million women are obese. Forty million children aged five and under are overweight. As has been pointed out, this situation is likely to increase the risks for future diabetes, heart disease, and cancer, and may drive the developing world into the problem of the double burden of infectious and chronic diseases.

At present, the prevalence of overweight people, defined as a BMI of 25 or higher, in the US, Australia, and other developed countries has reached 60 to 70%. In low-income countries such as Mexico, South Africa, Fiji, and Brazil are also seeing increases in the percentage of overweight and obese people. We can see that obesity is emerging as a problem imposing a double burden on developing countries and also an issue affecting them in common with developed countries (**Slide 2**).

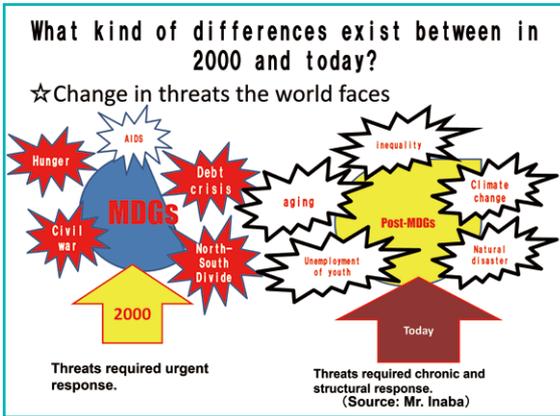
When did this situation begin? The obese population has increased rapidly since 1980. Today, one out of five people in the world is said to be overweight. This situation has expanded at a much greater speed than the AIDS pandemic (**Slide 3**). We might be in a situation in which the

\*<sup>1</sup> This article is a revised transcript of the presentation delivered by the author at the Takemi Program 30th Anniversary Symposium, which was held at the JMA Auditorium, Tokyo, on November 23, 2013.

Due to space limitations, not all of the slides shown in the original presentation appear in this article.

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(Slide 1)



(Slide 2)

Country	Over weight (BMI ≥ 25 (%) )		Obesity (BMI ≥ 30 (%) )	
	Male	Female	Male	Female
India	10.0	12.5	1.3	2.5
The Philippines	24.5	29.1	4.5	8.3
China	25.1	24.9	4.6	6.5
Brazil	53.5	52.0	16.5	22.1
Fiji	60.1	72.9	21.3	42.2
South Africa	62.0	73.6	23.2	42.8
Mexico	67.8	70.3	26.7	38.4

Country	Overweight (BMI ≥ 25 (%) )		Obesity (BMI ≥ 30 (%) )	
	Male	Female	Male	Female
Japan	25.9	15.9	5.5	3.5
Italy	58.3	40.1	19.3	14.9
German	62.8	46.6	23.1	19.2
Australia	66.5	56.2	25.2	24.9
USA	72.5	66.3	30.2	33.2

Global status report on non communicable diseases, WHO, 2010

(Slide 3)

Since 1980, obesity population rapidly has increased globally. One out of five is categorized as overweight (=BMI>25).  
 It looks like pandemic after AIDS

(Slide 4)

**Trend in the obesity population aged 5 y.o.**  
 The number of children with overweight and obesity (million)

	1990	1995	2000	2005	2010	2015	2020
Developing country	20.7	22.4	25.0	28.9	34.7	42.0	49.9
Developed country	6.2	6.3	6.4	7.1	8.1	8.8	9.5

2.4 times (Developing country increase from 1990 to 2020)  
 1.5 times (Developed country increase from 1990 to 2020)

DE ONIS, M., BLOSSNER, M. & BORGHIL, E. 2010. Global prevalence and trends of overweight and obesity among preschool children. *Am J Clin Nutr*; 92, 1257-64.

entire world will suffer from obesity. This figure shows the percentage of obese adults against a time axis. You can see that the rate of obesity has increased at an extremely fast pace.

This slide shows calorie consumption by region. In North America and Western Europe, daily energy intake exceeds 3,500 kcal. The world average was 2,800 kcal in 2009, and obesity has increased in this situation. This slide shows per capita GDP and per capita consumption. As per capita nominal GDP goes up, so does energy intake. Accordingly, there are obese people in developed countries. Obesity has also been increasing even in countries with low per capita consumption. Despite low energy intake in the national average, an increasing number of people are consuming a lot of calories. This means that some people are consuming few calories.

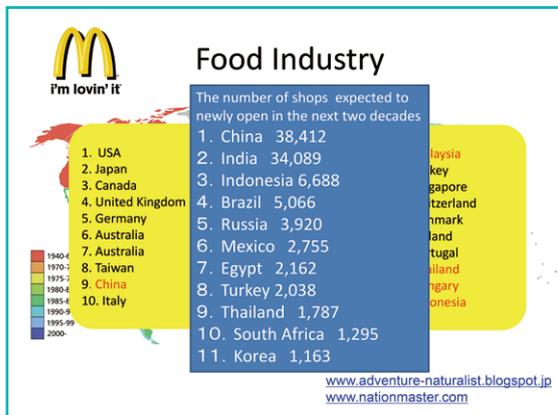
Looking at obesity and income disparity, this slide shows the result that obesity increases as economic disparities grow.

The world seen from this perspective may be paradoxical in a sense. While 2.4 billion people (34%) are overweight, one billion people in the world are starving. The two opposite conditions exist side-by-side within the same world, within a region, and within a country. This is the reality of the world today.

The results of a study on homeless people in Boston in the US showed that one in three falls under the category of clinical obesity. It wasn't very long ago that being thin indicated malnutrition, but it has been pointed out that nowadays obesity could be disguised malnutrition.

This figure shows the trends in the obese population aged 0-5. The childhood obesity pop-

(Slide 5)



ulation in developing countries stood at about 20 million in 1990, grew to 35 million in 2010, and is estimated to approach 50 million in 2020 (Slide 4). Childhood obesity is a cause of adult obesity and maternal obesity is a cause of childhood obesity. Moreover, childhood obesity has a long-term impact lasting into future generations. If obesity is a cause of many chronic diseases, we may be holding a time bomb that could result in a dramatic increase in health problems in the future.

Meanwhile, globalization has brought about many changes. This slide shows the global distribution of McDonald's restaurants. The highest numbers of outlets are in developed countries, with the US in the top place and Japan in second followed by Canada, the UK, and Germany. However, if we take into account McDonald's prospects of future expansion potential over the next 20 years, we get a list including developing countries: China could easily accommodate 38,000 economically viable outlets while India could have about 34,000 (Slide 5).

This slide shows obesity and fat accumulation within that context. Interestingly, it has been pointed out that the metabolic changes triggered by obesity closely resemble the changes in energy metabolism occurring in hibernating animals. The adaptive changes occurring in obesity-prone people are considered to have evolved from the adaptive process that would enable us to endure long periods of food shortage. However, in this age of plenty, it is highly likely that this has become a maladaptation, what is technically known as the mismatch paradigm.

The world today may have this kind of complicated health problem.

Obesity has been around since the distant past. As a rare phenomenon, obesity is thought to have been a symbol of beauty and wealth, as exemplified by the Venus statue from a site in Germany that is over 20,000 years old, and a portrait of Daniel Lambert of England depicting a person who might be the fattest individual known at that time. So, these symbolized beauty and wealth.

Keeping that situation in mind, lastly I would like to give you some near-future issues indicated by obesity. The world has been seeing a rapid increase in obesity since 1980. At present, between one and 1.3 billion people fit the definition of obesity. This appears to be the next pandemic following on from AIDS. There are clusters in the distribution of obesity like those seen with infectious diseases. Assuming there is a cultural infection factor, we might be able to apply infection epidemiological and mathematical models that we have cultivated in the area of infectious diseases. In America, obesity has increased rapidly since 1980. There are 12 million Americans with a BMI over 40. There are said to be about one million Americans with a BMI over 70. Sixty-three percent of adult women are overweight and a half of this group are said to be obese. However, these percentages are leveling out. Does this mean we have reached saturation of obesity in the modern environment? What will happen in Japan in the future? How will obesity spread in the world? We need to address these issues. Meanwhile, in the South Pacific, obesity and type II diabetes affects 70% and 40% of people, respectively. What should we think about this problem? It has been pointed out that the people in Tibet and other high-lying lands who are adapted to higher altitudes are more likely to have a greater risk for obesity and diabetes. This may be explained by the possible involvement of thrifty genes or as an example of past adaptation turning into modern maladaptation. On the other hand, gut peptides that suppress eating and influence obesity have an antibacterial effect, and the relationship between obesity and infectious disease has been gathering attention recently. How should we approach these problems? Finally, here is something to consider that may be a little more fundamental. Human babies have the highest amount of body

fat among mammals, and some authors consider this a necessary adaptation to support our large brains. This abundance of adipose tissues has an effect on the immune system and has been

suggested to have a protective effect against infection. Is adapting to obesity in the future the direction in which humanity should evolve? The time has come for us to confront these issues.

#### Comment



Keiji TAKEMURA<sup>2</sup>

Actually, I brought here is a book written by Dr. Yamamoto, a paperback book entitled *Infectious Diseases and Civilization* published by Iwanami Shoten. His previous book treated new-type influenza, and I expect that his next book from Iwanami will cover the topic of this speech.

What are our future prospects when faced with the obesity problem? Genetically modified foods such as wheat and cornstarch are being imported into Japan. There is a cornstarch plant in Nara. When I visited it on an industrial health tour, I asked whether the corn they were using was genetically modified, but they did not answer, claiming that it was a trade secret. When we were children, there was a school break during the rice-planting season. Children of rice farming families helped to plant rice from the time they were in kindergarten and elementary school. Even children of non-farming families

were told to help with cleaning the house, and so they too worked hard, moving their bodies a lot. Food supply was basically insufficient up until about 1965 or 1975, but nowadays, high energy intake has become a major problem due to various factors. The government, educators, and we who are engaged in healthcare now have to do our best to address this problem.

Masao Fukasawa, who would become the mayor of Sawauchi Village in Iwate Prefecture, moved to Taiwan with his wife. She died there, and he later returned to Japan, leaving his children behind. Considering he had to do something for his home village, he campaigned for and achieved zero infant mortality in Sawauchi Village. Doctors are important, but it is the role of local medical associations to enlist everybody, including public health nurses, all residents, rice sellers, confectionery shops, etc. so that all these people work together to build a healthy community. I am always saying this at the Rotary Club meeting, but I can never seem to find common ground with businessmen. Nevertheless, I want to keep pushing forward and addressing the problems of today and the future.

<sup>2</sup> Nara Medical Association, Nara, Japan. Vice-Chair of the JMA Global Health Committee.

## Panel Discussion\*1



- Chairs:** Masami ISHII (*Executive Board Member, JMA*)  
Shigeru SUGANAMI (*Committee Member, President, AMDA*)
- Moderator:** Kunihiko SUZUKI (*Executive Board Member, JMA*)
- Panelists:** Michael R. REICH, Masamine JIMBA, Yasuhide NAKAMURA,  
Taro YAMAMOTO, Takashi NAGATA, Naoki KONDO

**[Dr. Suzuki]** We now begin the panel discussion. Dr. Ishii and Dr. Suganami, who is a member of JMA's Global Health Committee and president of AMDA, will chair the discussion. As you know, AMDA participated in on-site relief operations after the recent large-scale typhoon disaster in the Philippines, and JMA provided funding to help support their efforts. Well then, let us have a good discussion.

**[Dr. Ishii]** Speaking of AMDA and the typhoon damage relief efforts in the Philippines, the Japan Self-Defense Forces and the AMDA teams, which are now in the interior of the Philippines, finally started to collaborate with each other yesterday. They are now able to engage in humanitarian assistance while securing safety. The JMA would like to continually support AMDA, and

so it recently provided a first round of funding. JMA members have asked me how the fund raising is progressing. I will let you know and ask for your support when we obtain clear information on the situation.

Let's move on to the main topic. The speeches we heard today clarified many aspects of the main theme of this symposium—"From the community to global perspectives, from the global to community perspectives." We would like to hear anything that the speakers would like to add.

**[Dr. Kondo]** As Dr. Jimba mentioned in his talk, Japan went from being a developing country to joining the ranks of developed countries in terms of health. There is no doubt that the achievement of universal health coverage was very much tied to that, but Japan did not reach

\*1 This article is a revised transcript of the panel discussion at the Takemi Program 30th Anniversary Symposium, which was held at the JMA Auditorium, Tokyo, on November 23, 2013.

the healthiest nation in the world just because of universal health coverage. Well then, what else did Japan do? How was it able to overcome so many infectious diseases?

I talked about the fundamental assets that existed in Japan and community initiatives, and I would like to see those kinds of Japanese experiences communicated more to the world. I would like to ask Dr. Jimba how to convey this message to the world and what the current status of such initiatives is.



**[Dr. Jimba]** The establishment of the system is only part of the story; community health efforts and the practice of community medicine, which together brought the system into fulfillment, had a big part to play.



By the way, something that I noticed while preparing for today's speech was the extreme dearth of literature in English relating to community health in Japan. Most accounts are only in Japanese books and essays. Given this situation, it will be difficult for the people of the world to discover the community health initiatives in Japan. In this respect, we did not make enough effort. As for Yachiho Village, the thing that got the village going on its health promotion activities was an outbreak of dysentery in 1953. That outbreak of dysentery killed 222 people. The village created health instructors to fight the dysentery outbreak, and based on this experience, the initiatives talked about earlier were started. The health instructors who worked to combat dysentery or infectious disease later worked as health instructors fighting hypertension and other non-communicable chronic diseases (NCDs). This initiative could be introduced as a very effective example for developing countries, where the pattern of disease is shifting from infectious diseases to NCDs. However, these kinds of initiatives have not been recorded in the English literature sufficiently. If this situation is improved, the efforts made in Japanese communities could be disseminated better to the rest of the world. There is a wealth of Japanese literature, and it needs to be summarized well and disseminated.

**[Dr. Nakamura]** I would like to add two points to this discussion from the perspective of maternal and child health. The collaboration between public health nurses, midwives, and physicians

was very important in improving maternal and child health after the war. We use the term “team medicine” nowadays, but a lot of collaboration has been taking place in community medicine since much earlier. When I talked with midwives who are now in their 70s and 80s, they said that it was the community OB-GYNs who helped them out back in the old days when there were only very limited resources. That kind of collaboration existed within the community. It is just that nothing is left as hard evidence.



The other point is the bottom-up power of the people working in the community. This works in combination with the top-down suggestions given by the national government, the Ministry of Health, Labour and Welfare, and more importantly local governments. These two approaches meshed together nicely. I feel that the quintessence of community medicine in Japan lies in the ideal interaction between protection from above and empowerment from the community, as Keizo Takemi's concept of human security implies.

**[Dr. Ishii]** When we look at changes occurring around 1957 and 58, when Dr. Taro Takemi became president of JMA, we find that various networks were formed in the community involving school health, community health, health checkups, and health screenings in the workplace. Something happened when these became entangled with community power. Universal health insurance became a tool to back that up. And the change had a positive effect in that the people who used to hesitate to access medical care came to feel free to access medical care whenever they needed it.

**[Dr. Reich]** This is a very important question. How do we explain the fact that Japan is the healthiest nation in the world? Listening to your comments, I am inclined to conclude that there is no simple explanation. We can say that particular conditions enabled Japan to achieve a certain success. But what about the effect of universal health coverage? This was a necessary condition, but I do not think it alone was sufficient to achieve success. If you think about it, the UK had universal coverage even before Japan. But, that alone did not make the UK the healthiest nation



in the world. In the end, multiple factors are involved. That is, the state of health improves when many factors, such as the political situation, the economic situation, the role of doctors in private practice, how drugs are used, food, and exercise, all fall into place. The next important question is, what will happen to Japan in the future? How will the situation change if the Japanese become fat like Mexicans and Americans? If that happens, you will eventually need something that affects human behavior. At that time, who will do what? What will be the role of physicians in private practice? What will be the role of the Japan Medical Association? This is an important theme for future discussion.

**[Dr. Ishii]** Japanese medical care had reached a certain height in the 1980s when the Takemi Program was created. At that time, Dr. Takemi wanted to create a platform at Harvard that would create a strong link between domestic and global health so that Japanese information would be brought out and information brought from outside would be reflected in Japan. When you actually go there, what can you see? I would like to hear some comments on that.

**[Dr. Nagata]** What I got out of the Takemi Program was the conversations I had with other Takemi Fellows from many different countries. The high value of maternal and child health handbooks was something that we did not notice on our own;



It was something we were reminded of by having it pointed out from another perspective. The strength of the Takemi Program is that it provides a place where one can obtain new points of view.

**[Dr. Nakamura]** I want to share with you what I thought amazing about the Takemi Program. There was a health economist from South Korea on the program at the same time. He was not a physician. People who do economics come into medical schools to do public health and discuss medical economics there. I learned that such people are around here and there. I feel that Japanese physicians have fallen into the habit of interacting only with other physicians. But on the program, it was not like that; there were people with all kinds of backgrounds. There were sociologists and journalists, and they would go and talk about health. I learned that to improve health, medical care gets better by having these

kinds of discussions not just among healthcare professionals but also with people in various fields. In that respect, I thought that the people from so-called developing countries were ahead of us.

**[Dr. Jimba]** I went to Harvard University twice and what struck me was that many different kinds of values are esteemed equally. For example, there was a researcher who, even though he didn't have a doctorate or even a master's degree, loved research and had written more papers than Japanese professors. He was extremely satisfied in his position. There was also a person who was living a happy life, satisfied with his position, engaging enthusiastically in fieldwork as a lecturer; he didn't need to become a Harvard professor to feel happy. In Japanese universities, on the other hand, one gets the impression that becoming a professor is the only goal. But, I felt that depth of character not like that is wonderful. On a personal note, a previous professor of my department told me that he wanted me to fulfill a role of connecting the medical front and the university. People on the front conducting medical and health activities cannot write papers while researchers in universities who can write papers do not know the reality in the field. He told me that people who have both skills will be needed in Japan from here on. I am grateful for the Takemi Program for allowing me to strengthen myself for that kind of work.

**[Dr. Ishii]** Dr. Suganami is involved in community medicine and international contributions during disasters, and I would like to hear a comment from him in that regard.

**[Dr. Suganami]** I always think to myself, "What would Dr. Takemi do?" Dr. Takemi used the phrase "fundamental, far-reaching, and eternal" and also spoke of "professional freedom."



Having a medical license means that you should help patients, should save their lives, and should not turn your back on them. I am deeply interested in why Dr. Takemi chose the word *freedom* here instead of *liberty*. Freedom means not to allow oneself to be shackled, to be unfettered. Dr. Takemi probably meant to tell us to break any shackles in order to save patients' lives. That is why he used the expression freedom as a professional, and in that I feel his sense of *noblesse oblige* (i.e. the responsibility of a person of high rank) as a physician. I associate every usage of the phrase professional freedom with *noblesse oblige*. This is true in community medicine and disaster medicine. To go beyond ethnicity, religion, and national borders is the essence of Dr. Takemi's thought on *noblesse oblige* and professional freedom. I am working in community medicine and disaster medicine and always thinking about what professional freedom means.

**[Dr. Ishii]** Here is a question from Mr. Inaoka of the Ministry of Foreign Affairs. What kind of system should Japan develop in order to draw on all of its human resources and wisdom, in terms of the challenges the country faces and learning from one another with developing countries. As mentioned by Dr. Yamamoto in his talk about the future, we are facing many demands in the field. What can the national government do to help? What do you think about this?

**[Dr. Yamamoto]** This was mentioned in Dr. Jimba's speech, but when the system becomes strong, the power of communities weakens. When people are provided with a good system, the decision-making power of the people who participate in that system declines. In other words, what we mean by a good system is to create a system whereby benefit is obtained reliably even if the people who benefit from it say nothing. Nevertheless, when the system gets into motion, it weakens the power of those people who participate in it. After the war, Japan built a really good system. It built a good system and managed it well, and because of that, we seem to be facing certain problems. Actually, after listening to today's talks, I thought that the lessons and learning that Japan really needs to communicate to the world might be how to overcome and deal with those problems. Thirty years ago, Dr. Taro Takemi felt



the bud of what might be a modern issue and created the Takemi Program. Sure enough, 30 years later, it has become a reality. There is a lesson there. If we are currently noticing the germination of a problem like the conflict of the people participating in a good system, we should begin to consider how we can prepare for and overcome that problem when it occurs 30 years down the road and how it will emerge as a specific challenge. I felt that Dr. Takemi taught us that by creating this program.

**[Dr. Ishii]** Incidentally, participants in JMA's Global Health Committee include not only physicians in community medicine, specialist physicians, and observers (Dr. Maruyama of the Japan Primary Care Association and staff members from the Ministry of Foreign Affairs and the Ministry of Health, Labour and Welfare) but also people who are creating a network of young doctors called the Junior Doctors Network. We now have a network of specialists brought together through the Takemi Program from all over the world and from Japan. The challenge in the next phase will be how the interns working hard in community medicine will use the network as a whole. Considering about that, what can we see if we look into the future from the current situation? Michael, may I ask you for a closing comment that includes an overall forecast?

**[Dr. Reich]** One premise of the Takemi Program is that, ultimately, it is individuals who create the relationship between the local and the global. The growth of each participant in the Takemi Program (as Takemi Fellows) is what makes the program work. When they go back home to their organization, they make the organization better, and when the organization becomes better, the community becomes better, and when the community becomes better, the country becomes better, and when the country becomes better, the world becomes better. These connections all start with the individual. One year of studying in the Takemi Program is a luxury. For one year in your life, you have the freedom to study what you want to. How will you grow? That is a rare luxury year in a person's life. We hope that this will make the world a better place. And after listening to the comments of these five people today, all former Takemi Fellows, I conclude that it is succeeding quite well.

## Closing Address

Fumimaro TAKAKU  
*President, Japanese Association of Medical Sciences*



As Dr. Reich said, the 30th anniversary symposium for the Takemi Program in International Health was a great success. During his Keynote Speech, Dr. Reich introduced talks given by Takemi Fellows from many different countries at the symposium held in Boston. Listening to that and to the talks given here by five Takemi Fellows, I was genuinely moved by the foresight of Dr. Taro Takemi, who planned this program in international health 30 years ago. At yesterday's party, there was discussion of keeping the program going for another 30 years. I believe that the program will continue, and I hope that young people will line up to participate and study the situations in other countries. Since the Japan Medical Association and the Japan Pharmaceutical Manufacturers Association are, after all, supporting such a great program, the outcomes need to be publicized more. Now, I would like to once again express my appreciation to Dr. Reich for giving the keynote speech and to the five Takemi Fellows who gave talks today. Thank you very much.

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