

Session 3

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

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

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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.

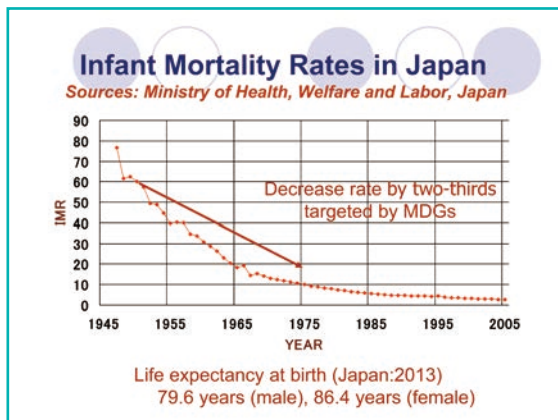
This slide shows a comparison of the infant mortality rates in Japan and the US (**Slide 2**). The infant mortality rate in Japan declined rapidly after the end of the chaotic period following World War II, falling below that of the US in 1964, which just so happened to be the year of the Tokyo Olympics. 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 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.

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

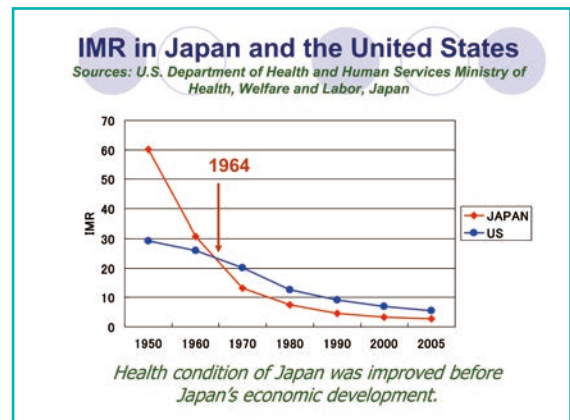
Due to space limitations, not all of the slides shown in the original presentation appear in this article.

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(Slide 1)



(Slide 2)



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.

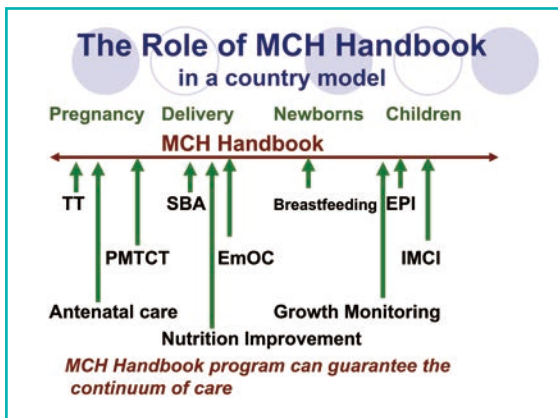
Today, MCH handbooks are used in over 30 countries, but only in Japan the book was handed out to a pregnant woman upon submission of a notice of pregnancy to the government (Slide 3). This practice in Japan startles people in other countries, who would observe; “Do you really notify the government of 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

(Slide 3)

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 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-

(Slide 4)



(Slide 5)



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 questionnaire 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 problems 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 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

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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.