

Megacity-Megahealth: Tokyo experience

— Human security for all generations —

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It is my great pleasure to have an opportunity to give a lecture at the Scientific Session in the 63rd World Medical Association General Assembly 2012.

Japan's Experience

I would like to start my presentation with a historical review of Japan's experience, because Japan was itself a developing country just after the Second World War when there was no Sony Corporation or Toyota motorcars. There was a high prevalence of many kinds of infectious diseases and many children died before their first birthday. However, individuals, families, and the community made efforts to fight against infectious diseases and improve maternal and child health through both formal and informal collaboration.

Soon after the Second World War, the crude birth rate dropped sharply. As you can see there was a sharp fall (about 26% below the previous year) in 1966 (**Fig. 1**). This year was a "Hinoeuma" year (the Year of the Horse in the Chinese calendar) when many couples did not want babies because of the traditional belief that a girl born in a "Hinoeuma" year will have bad fortune, by, for example, killing her husband. Of course, we cannot find any scientific evidence to confirm the effects of "Hinoeuma"! However, many parents did not have babies this year because of this belief. In fact, birth and death is one of the most conservative fields because each ethnic group has preserved traditions related to pregnancy, delivery and child-rearing, like the one mentioned.

I would now like to show you a comparison

between the infant mortality rate (IMR) in Japan and the United States. In 1950, the IMR in Japan was about double that of the US's. However, in 1964 the IMR in Japan dropped below that of the US, despite the fact that Japan was still a poor country with a GNP per capita of only 780 US dollars. The Japanese Government even had to request a loan from the World Bank to build the bullet train. I would like to emphasize this. The state of the economy cannot explain everything. Even though the economic situation is poor, people can still enjoy healthy and happy lives (**Fig. 2**).

A joint Japanese and American research team investigated the reasons why the IMR in Japan was low. The team concluded there were five possible explanations for Japan's low IMR, one of which was the use of maternal and child health (MCH) handbooks.¹ Japan's experience is different from that of many developing countries. However, I am sure that the MCH handbook program is just as important a tool to ensure the quality of life of mothers and children.

Human Security

Human security is a relatively new concept centered around the empowerment and fulfillment of human potential and based on the assumption that the best protection for peoples should encourage their capabilities.² I would like to discuss health in the Tokyo megacity by adopting a human security approach, especially with regards to MCH, the elderly, and disaster preparedness: that is to say, birth, death, and catastrophe in a Megacity.

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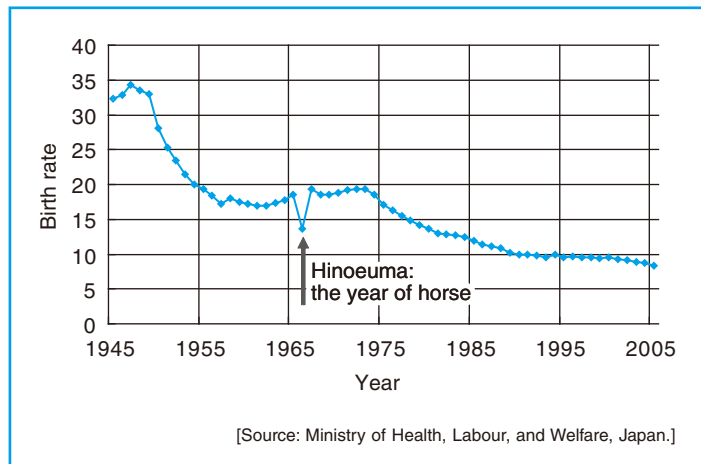


Fig. 1 Crude birth rates in Japan

Japan has developed science and medicine, keeping our traditional belief, which is not harmful.

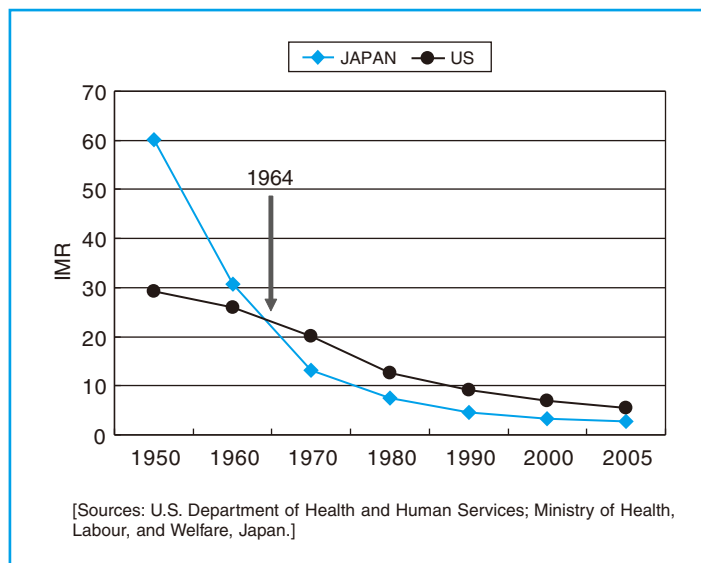


Fig. 2 IMR in Japan and the United States

Health condition of Japan was improved before Japan's economic development.

Maternal and Child Health Handbook

In 1948, a handbook for mothers and children (*Boshi Techo*) was first distributed by the Ministry of Health and Welfare, Japan. The content consisted of registration details, information about maternal care and deliveries, health check-up and growth records for the child, and a ration for food.

Now, MCH handbook is distributed at office of local governments when pregnancy registration is conducted in Tokyo. Obstetricians, pediatricians, public health nurses and midwives may write down medical records in MCH handbook at hospitals, clinics or health centers. Parents bring MCH handbooks to clinics when their children get sick. The coverage of MCH handbook is almost 100%. Most parents keep MCH



Fig. 3 Beautiful MCH handbooks in the world

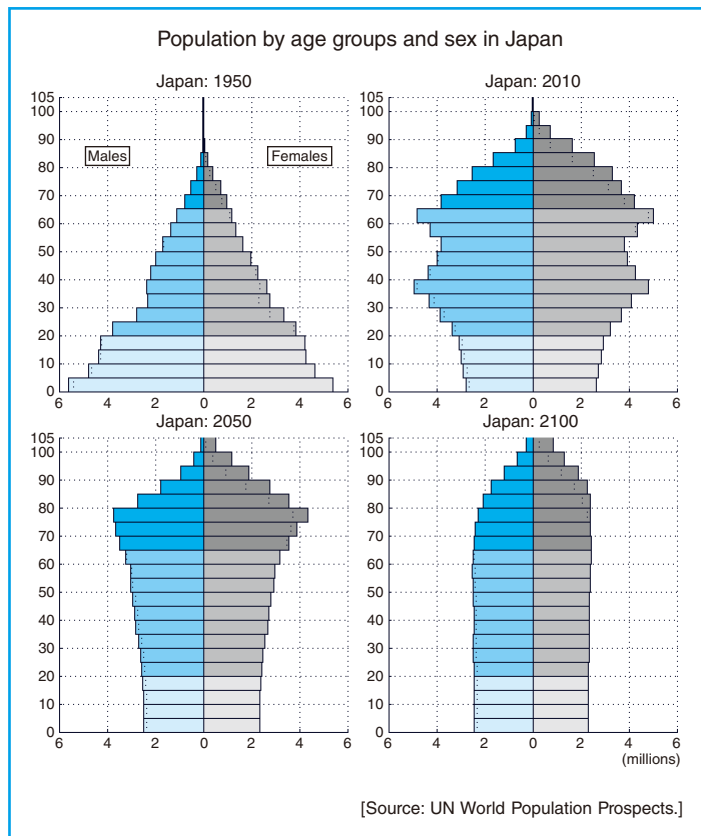


Fig. 4 Increasing elderly population in Tokyo

handbooks until their children are married.

MCH handbooks have since spread not only to developing countries but also to developed countries, such as Utah State in the United States

(Fig. 3). MCH handbook program is the most effective where there are many health professionals and health care workers work actively and when a sufficient health care delivery system

exists. The contents should be appropriate for the community. There are disadvantages of illiterate parents. But the survey revealed that the low educated mothers get more information on health through MCH handbook than highly educated mothers in Indonesia. When there are many illiterate parents, many pictures and figures should be added.³

MCH handbook can also endorse human security approach to enable people to develop the capacity to cope with difficult conditions during pregnancy, delivery and child-rearing.

The Elderly

The elderly population has increased rapidly in Tokyo (**Fig. 4**). The majority of its elderly were born in rural areas and moved to Tokyo for work during Japan's period of rapid economic growth. Most of "no return elderly" have chosen to stay and die in Tokyo, instead of returning to their hometowns. Dr. Inoue told that the characteristics of "no return elderly" are very different from the elderly who have remained in rural areas.⁴ "No return elderly" have relatively high levels of education and have often had business careers but they tend to lack social capital due to relatively weak family and community networks.

Disaster

The Great Kanto Earthquake hit Tokyo and its neighboring prefectures on September 1st 1923, resulting in a death toll of more than 105,000. Since then disaster preparedness events have been conducted at schools, official departments and many business offices on September 1st every year. The Great East Japan Earthquake and Tsunami of 2011 tells us much about the strengths and weaknesses of Japanese society.

Several hundreds of the Japan Disaster Medical Assistance Team (DMAT) provided emergency medical services just after the 2011 earthquake. Thereafter, the Japan Medical Association, the Japanese Red Cross Society, and the Japan Primary Care Association, as well as municipalities and private hospitals continued to extend their support. However, a shortage of food and toilets in evacuation centers soon became apparent. A public health approach and greater psychosocial support were basically needed.

Inspiration From British Museum

Megacities have big advantages: a lot of human resources such as health professionals; universities and institutes conducting health research; and highly advanced infrastructures. However, from the viewpoint of human security, both strong leadership with regard to public protection and the empowerment of local communities are essential. The roles of frontline health workers become more important at the interface of protection and empowerment. The final target of health for everyone in a megacity is to entail a harmonious society, where people feel secure growing up, having children, working, growing old, and dying.

Japan gallery at the British Museum said that Japan has successfully developed a thriving, modern, high-tech society, while celebrating many elements of its traditional culture.

Each Megacity has its own history, culture and customs. I hope that medical associations will develop a modern and high-tech medical care as professionals, and simultaneously celebrate many elements of social capital and traditional manners to ensure the quality of people in the world.

Thank you very much for your very kind attention.

References

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