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## Chapter 12 Towards Application of Japan's Experience in Public Health and Medical Systems to Developing Countries

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The aims of this study are to analyze how Japan improved its standards in public health and medical services, and examine the implications for today's developing countries to improve their own public health and medical systems.

In Part I, we presented examples of the ways that Japan wrought improvements in its public health and medical services after the commencement of the Meiji Era, and also outlined the present system of provision of public health and medical services.

In Part II, we examined the Japanese experience in each of the main areas of public health and medical services. We discussed policy trends and major initiatives in each field, with a view to application in improvements in public health and medical services in developing countries.

In Part III, we will first overview the transition in Japan's public health and medical services, together with the history of the modernization in Japan. In the second part, we will compare Japan's experience with developing countries today, gaining a general grasp of the similarities and differences. With these in mind, we will develop a cross-sectional overview of the areas where caution will be required in applying those aspects of Japanese initiatives and experience that may be of use in improving public health and medical services in developing countries. We will also identify future issues and challenges when Japanese international cooperation will be implemented in this field and Japan's experiences will be applied in developing countries. Finally, we will point out further studies required by this study.

### 1. Discussion of Transition in Japanese Public Health and Medical Systems

Reviewing the five phases outlined in chapter 1, Part I, we will discuss the political, economical and societal background, considering the main health challenges in each period. We will then summarize the characteristics of Japan's initiatives that should be applicable to developing countries. The overall summary of Japan's experiences can also be seen in Figure 12-1.

#### 1-1 Phase I: Acute Infectious Disease Control (1868~1919)

The start of Phase I (1868~1919) is marked by the establishment of the Meiji Government as the first modern nation in Japan. Japan became a capitalist economy. Basic education was extended to almost the entire population during this period. Living standards improved for the class of city-dwellers who reaped the benefits of economic development. However, the majority of people who lived in rural villages were still pre-modern tenant farmers.

The greatest health problem in this phase was the spread of acute infectious diseases such as cholera, bubonic plague and smallpox, caused by increased movement of people and goods within the country, associated with the opening of the country.

The characteristics of Japanese initiatives in this phase are summarized as follows: 1) establishment of a "social defense system" for the control of acute infectious diseases; 2) establishment of a statistics system; 3) establishment of a system of practicing midwives; 4) principle of local medical practitioners and clinics; 5) principle of patient part-payment for medical services, under the strong-centralized control.

Figure 12-1 Overall Summary of Japan's Experiences in the Health Sector

Time period	Phase I	Phase II	Phase III	Phase IV	Phase V
	Acute infectious diseases control 1868~1919 (Meiji 1~Taisho 8)	Chronic infectious diseases control and formation of maternal and child health services 1920~1945 (Taisho 9~Showa 20)	Restructuring the health administration 1946~1960 (Showa 21~35)	Expanding medical services 1961~1979 (Showa 36~54)	Challenge of an aging society 1980~present (Showa 55~present)
<b>Main challenges for public health and medical services</b>	<ul style="list-style-type: none"> <li>Acute infectious diseases</li> </ul>	<ul style="list-style-type: none"> <li>Tuberculosis control</li> <li>Maternal and child health</li> </ul>	<ul style="list-style-type: none"> <li>Acute infectious diseases</li> <li>Tuberculosis control</li> <li>Maternal and child health</li> </ul>	<ul style="list-style-type: none"> <li>Lifestyle-related diseases</li> <li>Traffic accidents</li> <li>Environmental pollution</li> <li>Drug induced sufferings</li> <li>Occupational health</li> </ul>	<ul style="list-style-type: none"> <li>Low birthrate and aging society</li> <li>Health and welfare services for the elderly</li> <li>High costs of medical treatment</li> </ul>
<b>Political, economic and social background</b>	<ul style="list-style-type: none"> <li>Establishment of modern nation</li> <li>Establishment of capitalist economy</li> <li>Spread of basic education</li> <li>Poverty of rural villagers, making up majority of population</li> </ul>	<ul style="list-style-type: none"> <li>Encouragement of new industry</li> <li>Taisho Democracy</li> <li>Wartime footing</li> </ul>	<ul style="list-style-type: none"> <li>Chaos and poverty following defeat in war</li> <li>Loss of social infrastructure</li> <li>Democratization under GHQ guidance</li> </ul>	<ul style="list-style-type: none"> <li>Enjoyment of the fruits of advanced economic growth</li> <li>Changes in industrial structure</li> <li>Urbanization</li> <li>Pervasion of democracy</li> <li>Demand for higher education</li> <li>Awareness of human rights</li> </ul>	<ul style="list-style-type: none"> <li>Prolonged economic downturn</li> <li>Increased decentralization</li> <li>Becoming a mature society</li> </ul>
<b>Development of public health and medical system</b>					
Provision of public health and medical services(administration, facilities, personnel, public health information system, pharmaceuticals)	→	→	→	→	→
Maternal and child health	→	→	→	→	→
Family planning	→	→	→	→	→
Infectious disease control measures	→	→	→	→	→
Environmental sanitation (water supplies, etc.)	→	→	→	→	→
Environmental pollution control measures	→	→	→	→	→
Occupational health	→	→	→	→	→
Emergency medical care	→	→	→	→	→
Public medical insurance	→	→	→	→	→
<b>Characteristics of Japanese initiatives</b>	<ul style="list-style-type: none"> <li>Introduction of Western medicine</li> <li>Establishment of a social defense system to control epidemics under central control by the national government</li> <li>Establishment of a system of statistics</li> <li>Health Care Research Committee</li> <li>Adoption of principal of local medical practitioners and clinics</li> <li>Introduction of system of practicing midwives</li> <li>Principle of patient part-payment for medical services</li> </ul>	<ul style="list-style-type: none"> <li>Maternal and child health activities with community participation</li> <li>Pregnant Mother's Handbook system</li> <li>Outreach activities by public health nurses</li> <li>Institute of Public Health established</li> </ul>	<ul style="list-style-type: none"> <li>Establishment of a democratic public health and medical system from the central to the grass roots level</li> <li>Community-based health activities emanating from public health centers</li> <li>Activities of public health nurses and midwives</li> <li>Volunteer activities by community groups, private organizations, and corporations</li> <li>Utilization of school health resources</li> <li>Collaboration between government, academia and community</li> <li>Linkage with rural development</li> </ul>	<ul style="list-style-type: none"> <li>Achievement of universal health insurance coverage</li> <li>Establishment of a system of emergency medical services using fire-fighting organizations</li> <li>Popular movements produce measures to combat pollution and drug induced sufferings</li> <li>Spread of a system of medical service provision not relying on a referral system</li> </ul>	<ul style="list-style-type: none"> <li>Attempts to reconstruct the medical and social security systems to cope with the rapidly declining birthrate and aging society</li> <li>Municipalities become principal public health service providers</li> </ul>

N.B. Arrows indicate periods of application or progress. Sun marks indicate particularly important periods of expansion.  
Source: Compiled by the authors

## **1-2 Phase II: Chronic Infectious Disease Control and Formation of Maternal and Child Health Services (1920~1945)**

Phase II (1920~1945) saw increased industrialization, encouraged by policies encouraging new industry. Then, ending “Taisho Democracy” movement, Japan assumed a war position. Under military rule, the so-called Kenpei-Kenmin (Healthy Soldier, Healthy People) concept, war-related industries flourished, and the medical and public health administration was strengthened. In particular, control programs for the chronic infectious disease tuberculosis were established, and maternal and child health services were strengthened. The Ministry of Health and Welfare was established in 1938, under-pinning the basic structure of a modern system of public health and medical services.

The two main health issues in this period were tuberculosis which was known as the national scourge at that time, and the infant and maternal mortality rates with seriously high comparing with international standards. The principal achievement of Phase II was the emergence of a community-based approach to control tuberculosis and bring about improvements in maternal and child health. Characteristic of Japanese initiatives during Phase II were: 1) outreach activities by public health nurses; 2) community participation in maternal and child health; and 3) establishment of the Pregnant Mother's Handbook System.

## **1-3 Phase III: Restructuring the Health Administration (1946~1960)**

Japan had been defeated in the Second World War in 1945. Phase III (1946~1960) saw the rebuilding of the entire social system as a democratic nation under the control of the General Headquarters (GHQ) of the Allied Occupation Forces. Public health and medical

services were also reconstructed in line with this social restructuring.

As a result of the post-war chaos, acute infectious diseases had flared up. After bringing these under control, the major public health challenges were combating tuberculosis, lowering the infant and maternal mortality rates, and the popularization of family planning from the viewpoint of maternal and child health. The public health and medical administration was also extensively reformed during this period, under strong GHQ guidance.

During Phase III, the community-based approach emerging in Phase II underwent reconstruction and expansion. Characteristic of Japan's initiatives during this phase were: 1) active involvement of private organizations (community organizations, private groups, companies); 2) collaboration by academic groups (for tuberculosis, family planning, parasitic disease control); and linkages with 3) school health and rural development.

## **1-4 Phase IV: Expanding Medical Services (1961~1979)**

Economic growth accelerated during Phase IV (1961~1979). Per capita national income rose by 4.5 times in real terms over the 18 year period from 1955 to 1973, and the general population enjoyed the benefits of a sustained rise in living standards. The workforce shifted from primary to secondary and tertiary industries, accompanied by a rapid increase in employment opportunities in the cities. This resulted in the urbanization of the Japanese population<sup>1</sup>. Due to higher education and the adoption of democratic principles, awareness of human rights increased among the people.

Lifestyle-related diseases replaced infectious diseases as the major health challenge. Three major causes of death in 1960 were cerebrovascular disease (stroke), malignancies, and heart disease.

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<sup>1</sup> According to Ato, Makoto (2000) *Gendai Jinko Gaku* [Modern Demography], Nihon Hyoron sha, 7~8% of the total population moved between 1963~74.

Infant and maternal mortality rates and birthrate declined precipitately. In this period, the major health issues in Japan shifted from infectious disease control and maternal and child health, to lifestyle-related diseases.

At the same time, growth of heavy industries, urbanization, and the emergence of the automobile society led to new challenges, including environmental pollution, drug-induced sufferings, occupational health risks, and injuries from traffic accidents.

Characteristic of Japanese initiatives during this phase were: 1) achievement of universal health insurance coverage in 1961, leading to an expansion of medical services; 2) establishment of an emergency medical system using fire departments, in response to increased traffic accidents; 3) a popular movement against environmental and drug-induced sufferings, that brought about changes in government policy. During this period, the level of public health and medical services reached the same level as other advanced nations, thanks to increased economic growth and progress in medical science. Therefore, fewer initiatives unique to the Japanese are seen from this time on.

### **1-5 Phase V: Challenge of an Aging Society (1980~present)**

During Phase V (1980~present), Japanese society began to recognize the need to deal with the sharply declining birthrate and the aging population. Medical advances during this period lent further urgency to the search for a complete overhaul of the health sector. This struggle still continues to the present day. The older population (the population aged 65 and over) exceeded 7% in 1970, making Japan an “aging when society,” and the speed of population aging has been accelerated<sup>2</sup>. In 1991, the so-called “bubble economy” collapsed, and Japan entered a prolonged period of slow growth. Japan became a

“mature society” now. With pursuing decentralization since the 1990's, Japan is in the process of reconstructing the system of provision of public health and medical services on a more humanized basis. At the same time, the entire social security system is also reengineering to suit the mature society.

Phase V can be considered the period when Japan has been seeking to remodel its health care system to meet the mature society with dwindling birthrate and an aging population, advanced medicine, and diversifying needs. This requires: 1) the establishment of more efficient and effective medical delivery system, with emphasis on quality rather than quantity; and 2) the development of a community-based, synthesizing approach with medical, public health and welfare services to meet people's detailed demands.

## **2. Toward the Use of Japan's Experience in Developing Countries**

### **2-1 Feasibility of Applying Japanese Experiences to the Health Challenges Facing Developing Countries**

When we will apply Japan's experience to the health challenges facing developing countries, it is necessary to determine the situations in each country. In this session, we will consider the feasibility of applying Japan's experience in terms of the patterns of disease prevalence in developing countries.

For this analysis, we will use the WHO classification of countries into five groups according to child (0~5 years) and adult (15~59 years) mortality rates (see Table 12-1). We will consider the three classifications that are typical of developing countries, “Group B: Developing country with low mortality rate (80 countries),” “Group D: Developing country with high mortality rate (48 countries),” and “Group E:

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<sup>2</sup> The older population exceeded 14% in 1995, making Japan an “aged society,” and as of April 2003 it was 18.9%.

**Table 12-1 WHO Classification of Countries according to Child and Adult Mortality Rates**

WHO classification	Group name	Region and no of countries						
		Africa	Americas	Eastern Mediterranean	Europe	South-East Asia	Western Pacific	Total
A	Developed country	—	3	—	26	—	5	34
B	Developing country with low mortality rate	—	26	13	16	3	22	80
C	European country with high mortality rate	—	—	—	9	—	—	9
D	Developing country with high mortality rate	26	6	9	—	7	—	48
E	African country with extremely high mortality rate	20	—	—	—	—	—	20

Source: Produced by the authors from WHO (2002)

African country with extremely high mortality rate (20 countries)”<sup>3</sup>.

The main causes of death in the three groups (B, D and E) that we will be considering are given in Figure 12-2. In “Group B: Developing country, low mortality rate,” infectious diseases have been largely overcome, and are in the process of being replaced as the main public health challenges by lifestyle-related diseases such as malignancies and circulatory disorders (ischemic heart disease and cerebrovascular disease). In “Group D: Developing country, high mortality rate,” although infectious diseases have not been completely overcome, and issues remain in the field of maternal and child health, lifestyle-related diseases are emerging as the new public health challenge. In “Group E: African country, extremely high mortality rate”, HIV/AIDS contributes to the highest mortality rates of all. Mortality rates from other infectious diseases are also the highest of all groups, and the public health situation in these countries is the most serious and least favorable.

We can characterize “Group B: Developing country, low mortality rate” as being mostly in Phase IV, perhaps just entering into Phase V. “Group D: Developing country, high mortality

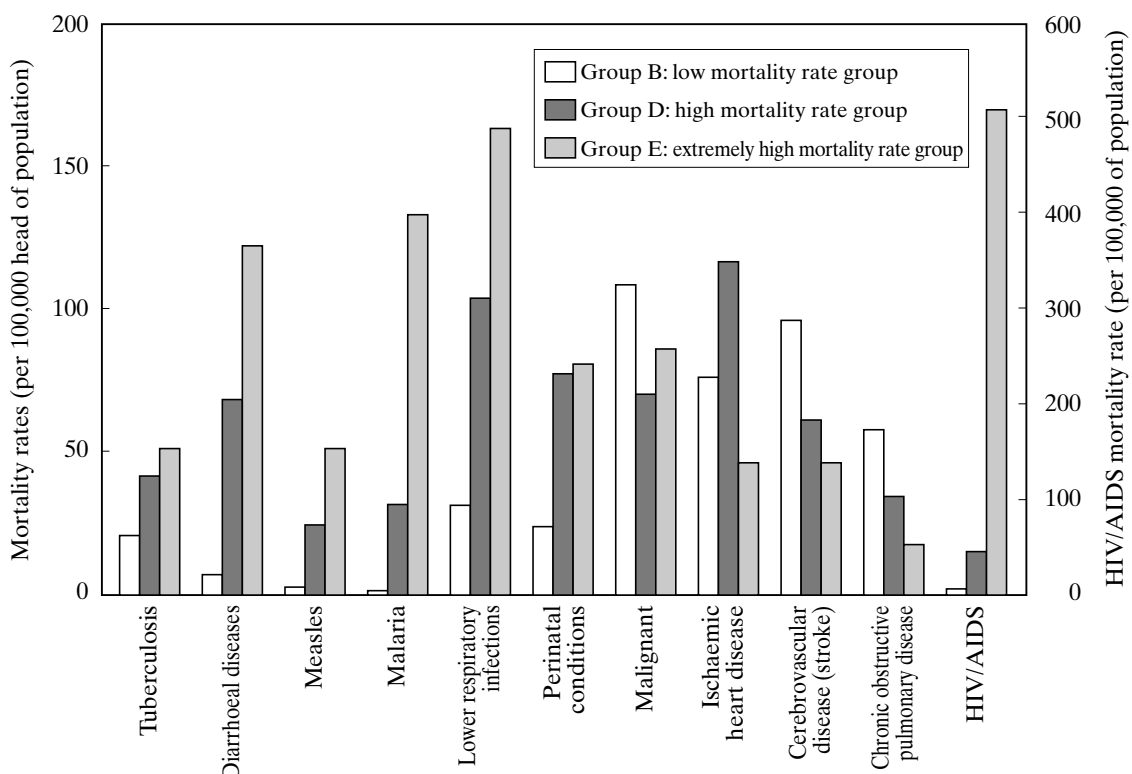
rate” are a mixture of Phases II and III, with some health problems from Phase I remaining, with lifestyle-related diseases from Phase IV just making an appearance. The countries in “Group E: African country, extremely high mortality rate,” on the other hand, are facing serious problems that Japan has never experienced.

In general, we can say that Japan faced and solved a single challenge in each period. Developing countries today tend to face ever increasing challenges, as each new health problem arises before the old problems have been fully resolved.

From the above, Japanese initiatives dating from Phase IV onwards should be of interest to “Group B: Developing country, low mortality rate.” For “Group D: Developing country, high mortality rate,” Japanese initiatives from Phases II and III should be applicable. Although initiatives from Japan’s experience in Phases I, II and III will be applicable to “Group E: African country, extremely high mortality rate group,” the issue of overriding importance in these countries is the control of the novel infectious disease, HIV/AIDS. These findings are summarized in Figure 12-3, and the aspects of Japan’s experience that may be applicable to each health challenge

<sup>3</sup> Excludes “A: Developed country group.” “C: European high mortality rate group (9 nations)” was also excluded, as it was confined to a small group of nations, and almost all were former member states of the Soviet Union, and therefore adult mortality rates have risen due to special societal circumstances (extremely high mortality rates from lifestyle-related diseases).

**Figure 12-2 Main Causes of Death in Developing Countries**



Source: Compiled by the authors from WHO (2002)

**Figure 12-3 Feasibility of Applying Japan's Experience to Health Problems in Developing Countries**

Period in Japanese history	Phase I	Phase II	Phase III	Phase IV	Phase V
<b>Main Japanese health challenges</b>	<ul style="list-style-type: none"> <li>Acute infectious diseases</li> </ul>	<ul style="list-style-type: none"> <li>Chronic infectious diseases</li> <li>Maternal and child health</li> </ul>	<ul style="list-style-type: none"> <li>Chronic infectious diseases</li> <li>Maternal and child health</li> </ul>	<ul style="list-style-type: none"> <li>Lifestyle-related diseases</li> <li>Environmental and drug induced sufferings</li> <li>Occupational health</li> </ul>	<ul style="list-style-type: none"> <li>Aging population</li> </ul>
<b>Main health issues for developing countries</b>	<p>Group D: Developing country with high mortality rate</p>			<p>Group B: Developing country with low mortality rate</p>	
	<p>Group E: African country with extremely high mortality rate</p>				
	<p>HIV/AIDS</p>				

Source: Compiled by the authors

are summarized in Table 12-2.

The above analysis looks at broad trends, and only represents one possible way of looking at this

subject. It goes without saying that initiatives need to be developed for each country after careful examination of the prevailing situation there.

**Table 12-2 Japan's Experiences in Public Health and Medical Services According to the Health Challenges Faced**

Health issue	Applicable period in Japanese history	Applicable initiatives and lessons learnt
Acute infectious diseases	Phase I	<ul style="list-style-type: none"> <li>Establishment and reinforcement of a consistent system of public health and medical services, comprising central government agencies, regional governments, public health centers, and healthcare service providers.</li> <li>Introduction of a notification system for acute infectious diseases with potential to cause serious health problems on a national scale.</li> </ul>
Chronic infectious diseases	Phases II and III	<ul style="list-style-type: none"> <li>Policy formulation based on surveys.</li> <li>Notification and registration systems.</li> <li>Community-based prevention programs, with willing participation of local residents.</li> <li>Linkages between public health centers and community organizations.</li> </ul>
Infant and maternal mortality rates	Phases II and III	<ul style="list-style-type: none"> <li>Activities of public health nurses and nurse midwives (it is important to provide sufficient staffing levels and remuneration, and a working environment that fires their enthusiasm).</li> <li>Establishment of public health centers.</li> <li>Promotion of maternal and child health educational programs in the community.</li> <li>Maternal and Child Health Handbook System (as well as a record of the health status, particularly in the puerperal period, for mother and child, the handbook contains guidelines for pregnancy checks, immunizations, and other health services).</li> </ul>
Family Planning	Phase III	<ul style="list-style-type: none"> <li>Promotion of family planning with the emphasis on protecting the mother's body, to increase the appeal to women (introduce as part of maternal and child health educational activities).</li> <li>An approach using local health issues, such as maternal and child health or parasitic diseases, as the entry point.</li> <li>Involve women in programs, as well as local decision makers, men, and parents-in-law.</li> </ul>
Environmental sanitation (water supply and sewage systems)	Phase IV	<ul style="list-style-type: none"> <li>Promotion of sustainable environmental sanitation through self-help and mutual aid by local communities.</li> <li>Municipalities produce plans to install water supply systems in accordance with their level of economic development. Finances are provided by the local government, with support from the national government.</li> <li>Waste treatment and household sanitation programs in collaboration with the Livelihood Improvement Movement.</li> </ul>
Environmental pollution	Phase IV	<ul style="list-style-type: none"> <li>Japan's experience of delayed response due to priority given to economic development teaches us the importance of prevention. A system of environmental assessments, and training the personnel to conduct them, is effective.</li> </ul>
Occupational health	Phase IV	<ul style="list-style-type: none"> <li>Survey workplace conditions through collaboration between government and industry.</li> <li>Cooperation between labor and management in improving the working environment is essential.</li> <li>Once corporation has gained sufficient economic strength, personnel such as occupational physicians should be recruited and trained, and the working environment improved, in a gradual process.</li> </ul>
Emergency medical care	Phase IV	<ul style="list-style-type: none"> <li>Introduce when a certain level of community-based system of provision of medical services has been established (confirmation required that infrastructure and other necessary condition have been met).</li> <li>Establishment of a centralized emergency communications network.</li> <li>Establishment of an emergency patient transport system (fire departments in Japan).</li> </ul>
Lifestyle-related diseases	Phase IV	<ul style="list-style-type: none"> <li>Promotion of preventive measures in countries where lifestyle-related diseases are replacing acute infectious diseases as the major causes of death.</li> <li>Introduction of personal health records and other health management tools.</li> <li>Promotion of initiatives involving the entire local community.</li> <li>Establishment of advanced medical research facilities.</li> </ul>
Public medical insurance	Phase IV	<ul style="list-style-type: none"> <li>Establishment of trial systems by willing communities and organizations.</li> <li>Development of a system with long-term vision toward a coming aging society.</li> </ul>

Source: Produced by the authors

## 2-2 Characteristic of Japan's Initiatives that Can be Utilized in Developing Countries

In the following sessions, we will discuss those aspects of Japan's experience that can be utilized in developing countries in improving their health sector systems, based on the analyses of each field in Part II of this book. To this end, we extracted from Part II those initiatives that can be of use to developing countries, as shown in the appendix to this chapter. We then classified the periods in which these initiatives were instigated, the periods in which they played an important role, and the major players in each initiative. As a result, we were able to identify lessons from Japan's experience under the following eight categories.

<Through all phases>

- (1) Government's commitment
- (2) Policy formulation based on reliable statistics and surveys

<Phases II & III Initiatives in chronic infectious disease control and maternal and child health>

- (3) Community-based public health approach (collaboration between government, the community, and non-profit organizations)
- (4) Private organizations involvement (community groups, non-profit organizations, companies)
- (5) Centered on professional women approach
- (6) Participation by scientists and researchers

<Phases IV & V Initiatives to expand medical services and in response to the aging society>

- (7) Universal health insurance coverage
- (8) Lessons learned from failures - dealing with environmental pollution and the aging society

We will discuss each of these categories in detail below.

### (1) Government's Commitment

In many developing countries today, it is taking considerable time to overcome challenges

in such fields as tuberculosis, maternal and child health, and population control. Without a strong commitment of the national government, it may well be difficult to achieve success in these areas. To demonstrate the firmness of its commitment, the government should explain to the people the importance of the initiative, provide the required funding, pass the necessary laws, and reinforce the administrative system to reach the rank-and-file.

Many developing countries are now engaged in decentralization, and the trend is for organizations to be built from the bottom up. This process is in no way impeded, however, by a strong commitment to solving health problems on the part of the central government. Furthermore, as long as there is no firm base of administrative services linking the central government, regional government, local government, and individuals, then a sustainable system of local self-government is unachievable, and true decentralization will not occur. A clear expression of commitment from the national government must come first, and in Japan's experience, this point takes a position of pride.

The Japanese system of public health and medical services has, throughout almost all the phases we have examined, been under central control, and extended relatively evenly throughout the nation. In particular, a strong sense of governmental commitment undoubtedly contributed to the achievement of favorable results within a short time. This was especially important in areas such as acute infectious disease control measures in the period of epidemic prevention, formation of the medical insurance system based on community-based medical insurance systems, national financing for medical services, government determination of medical service fees, and nationwide promotion of tuberculosis control programs and maternal and child health initiatives.

Based on these experiences, Japan can cooperate with developing countries to reinforce their governmental commitment in the following ways.



1) Japan can assist with capacity building in public health administration, at both the central government and regional government levels, and with establishing a system of collaboration between the two. 2) Assistance could be given with legislative backing, as worked so successfully in Japan, for infectious disease control measures, and for policy formulation in combating tuberculosis and HIV/AIDS. 3) Technical assistance could be given to countries aiming for universal health insurance coverage as a future goal, in establishing a system of community-based health insurance at the local government level that could later be expanded step by step.

## (2) Policy Formulation Based on Reliable Statistics and Surveys

The international community has recognized the importance and necessity of keeping statistics, since the period immediately following the end of the Second World War. Despite international assistance in this area, many developing countries are struggling to collect accurate statistics for the purposes of policy formulation and monitoring of basic information.

Population Vital Statistics were already being collected in Japan in the Edo Era (1603~1868), and census registrations were conducted from the Meiji Era (1868~1911). Reliable Population statistical information was therefore available at a relatively early stage<sup>6</sup>. A modern-scientific full census was commenced in 1920. The Health and Sanitation Research Council was also established, setting the course for policy formulation based on nationwide surveys. It is worthy of note that, at a

relatively early stage, statistical data concerning population and public health gave a clear picture of public health issues and the health needs of the population, enabling policy formulation based on reliable statistics. The registration system for infectious diseases, such as cholera, tuberculosis, and sexually transmitted diseases that have important social implications, and the strong emphasis on accurate, is also Japan's unique experience.

Establishment of statistical systems is an area in which the Japanese are particularly proficient, and there are variety of ways<sup>7</sup> to provide assistance. 1) Assistance in establishing a system of statistics collection through the conduct of population census and sampling surveys. 2) Assistance can be provided within an international framework, in statistical projects for which international comparisons can be readily made, such as the World Fertility Survey or the Demographic and Health Survey. 3) Assistance can be offered in developing estimation methods based on locking or not sufficiently reliable data. 4) Assistance can be given in such areas as reinforcement of the registration system using information from the community level as part of the DOTS strategy. 5) A number of systems unique to Japan, such as the Health Register for patients to monitor their own health status<sup>8</sup> and Health Handbooks given to patients to keep their results in developed by the Saku Central Hospital, can also be applied in developing countries. In addition to the above areas, assistance can be provided for countries to train their own personnel in each area.

<sup>4</sup> JICA, in collaboration with the Japan Anti-Tuberculosis Association, is presently investigating an initiative in Zambia that will use the DOTS strategy for capacity building in public health administration as part of assistance for HIV/AIDS control.

<sup>5</sup> Miura, Yoshimi (2002) "Sekai no Jinko Sensasu [World's Population Census]," Nihon Jinko Gakkai ed. *Jinkou Dai Jiten* [Encyclopedia of Population], Baifukan Co., Ltd.

<sup>6</sup> Yamaguchi, Kiichi (2000) "Jinkou Shiryō to Jinkou Tokei [Historical Materials and Statistics of Population]" Population Association of Japan ed. *Jinkou Dai Jiten* [Encyclopedia of Population], Baifukan Co., Ltd.

<sup>7</sup> Assistance in the field of statistics is also covered in Institute for International Cooperation, Japan International Cooperation Agency (2003) Second Study on International Cooperation for Population and Development, Japan International Cooperation Agency.

<sup>8</sup> Similar "Health Register" systems are seen in other regions of Japan.

(3) Community-based Public Health Approach  
(collaboration between government, the community, and non-profit organizations)

In almost all developing countries, health posts or health centers comprise the public health facilities in peripheral communities. Health volunteers are present in similar numbers to public health nurses in Japan. Community groups and NGOs are present in many countries. A coordinator to link these community resources is often lacking, however, and no organic collaboration between the various players.

A uniquely Japanese community-based public health approach was seen everywhere, particularly during Phases II and III from 1920 to 1960. This was a factor in the remarkable overall improvement in the field of public health and medical services in Japan over this period. The Japanese community-based public health approach is much broader in scope than what is commonly called "Community Health" in English nowadays, and can be considered a type of social dynamism. We will accordingly refer to the public health approach developed in Japan as the "Japan-style Community Health."

Analysis of the elements that make up "Japan-style Community Health" gives the following points: 1) In a period totally lacking in medical facilities or personnel, all the relevant parties (public health centers, public health nurses, community groups, hospitals and private clinics, local medical doctor associations, community centers, schools, etc.) collaborated in making the best use of community resources. 2) As the democratization of society spread, programs involving "Awareness Raising" and "Discovery-based Learning" led to the development of public health activities initiated by the community. 3) The coordinating role played by public health nurses, public health centers, local government, and hospitals. 4) Public health experts surveyed communities, eliciting and analyzing latent health needs of the residents. 5) Public health and medical

services constituted an area of great interest to the community (especially women) in their daily lives, so they were highly motivated to participate in the problem-solving process. Members of the community also became aware that participation in public health initiatives also addressed problems in other areas, improving livelihoods and raising productivity, further increasing their enthusiasm. 6) Through comprehensive public health initiatives along the above lines, the final result of these activities was regional promotion.

These elements of "Japan-style Community Health" contain a number of suggestions for low income nations today, and many cooperative programs incorporate these factors. An example is the "Integrated Project of Family Planning, Nutrition and Parasite Control" (1979~), run in Nepal by the Japanese Organization for International Cooperation in Family Planning (JOICFP) with the financial assistance of the United Nations Population Fund (UNFPA). This project has achieved remarkable results, developing a health program based on the needs of the community with parasite eradication as the entry point, fostering ownership by the local residents, and aiming for independent development through a user fee system.

JICA has also conducted a number of cooperative programs on similar lines. An example is the "Reproductive Health Project", run in Vietnam (1997~2000) with assistance from JOICFP. This project also incorporated many of the elements of "Japan-style Community Health," including reinforcement of public health administration at the community level, retraining of village public health personnel, improvements to public health centers, public health education for the community, and outreach activities by maternal and child health teams. The "Family Planning and Maternal and Child Health Project" in the Philippines (1992~2002) achieved excellent results from a

program of public health education for the community<sup>9</sup>, based in public health centers, that included puppet medical theatre, as earlier trialed by the Saku Central Hospital in rural villages in Japan<sup>10</sup>. The “Family Planning and Gender in Development (WID) Project” in Jordan used micro-loans for income-generating programs for women as the entry point, while at the same time involving the decision makers in the community, including men this project took. “Japan-style Community Health” activities in a variety of areas, such as promoting village development, the health of the community, and family planning through the empowerment of women.

#### (4) Private Organizations Involvement (Community Groups, Non-profit Organizations, Companies)

It is often the case in developing countries that government policy is not fully enforced. Reasons for this may be that the policy does not reflect the requirements of the actual situation at the site of implementation, or that there is no organization on the ground that has the strength to put into effect the public health activity.

Although public health policies in Japan have been implemented on a nationwide basis under central control, many programs have incorporated pre-existing non-governmental activities, or have utilized community groups already active in that particular area. Improvements in public health and medical services can be said to have been the result of collaboration between government and various non-governmental bodies. Community organizations in Japan have not just waited passively for the government to act; rather they have taken positive steps to protect their own

health and welfare.

Japan has a long history of mutual aid organizations in rural areas. From the late Edo Era (1603~1868) until the period of advanced economic growth, the several self-livelihood improvement movements were active in rural communities combating the chaotic conditions faced by rural villages at times of change<sup>11</sup>. One major example is the activities of “community-based health organizations” in poverty-stricken regions of Japan during the immediate post-war time. These organizations improved the living environment in the community, thereby preventing infectious diseases and improving the general level of knowledge of health issues.

The post-war activities of public health nurses and “livelihood extension workers,” given democratic direction by the GHQ, were therefore well received in rural regions made receptive by their historical experience. The Japanese Government has been adept at taking up successful programs commenced by community groups, universalizing them, and applying them on a nationwide scale. Successful examples include the post-war “No Mosquitoes and Flies Program,” “Women’s Association for Anti-Tuberculosis,” and the “Maternal and Child Health Promoter System.” Implementation of the Long-term Care Insurance Law, promulgated in 1997, is also one of the principal objectives of several private corporations and non-profit organizations (NPOs). The NPO Law itself is intended to utilize the power of the civil society, and can be considered the embodiment of a similar concept.

To meet the major challenges of each period, the government has established and utilized

<sup>9</sup> Public health education using techniques such as “medical theatre” and picture-story shows performed by the medical staff from the Saku Central Hospital has been part of some highly successful awareness campaigns.

<sup>10</sup> Japan International Cooperation Agency (2001) “Evaluation on Specific Topic: Evaluation of Population and Health Sector in Philippines, collaboration with USAID (The field of maternal and child health and family planning) (draft)”

<sup>11</sup> Mizuno, Masami (2002) “*Kindai Nihon Noson niokeru Seikatsu Kaizen Undo to Sengo no Noson Seikatsu Kaizen* [Livelihood Improvement Movement in the History of Rural Villages of Modern Japan and Lives of Rural Villages after the War], JICA, Study report on the cooperation for livelihood improvement at rural villages (First volume).

private organizations that have a strong public commitment (public organizations). Two typical examples are the Japan Anti-Tuberculosis Association (JATA), active in tuberculosis control initiatives, and the Boshi Aiiku-kai (Married Women's Voluntary Groups for Mother-Child Health and Welfare), active in maternal and child health. Both these groups were established as Imperial household initiatives, although they were set up as private organizations. They are managed by highly motivated specialists of the highest caliber, and the fact that these organizations have the Imperial imprimatur has been beneficial in increasing the level of goodwill for their programs from the general populace.

It has been characteristic of Japan that the private organizations have worked so effectively in overcoming health problems on a national scale in the fields of maternal and child health and tuberculosis control. Neither JATA nor the Aiiku-kai could be called a purely private organization, but their programs have been devised and implemented with community participation, and this bottom-up approach has been the driving force in moving large segments of the population.

In addition, private corporations have played a major role in areas such as tuberculosis control, family planning, and parasitic disease control, through vaccination and screening programs that aid in prevention and early detection. Their contribution was so great in tuberculosis control and family planning in particular that some consider that in the end the private corporations that were responsible for the success of initiatives in these areas<sup>12</sup>.

It would not be possible to apply Japan's

experience, with the activities of a number of uniquely Japanese private organizations, directly to developing countries. It is possible for many developing countries' government to take a successful example of community-based activities in progress in some regions as "good practice" in that field, institute them as policy, and provide funding for expansion to a nationwide project, with extensive exposure in the mass media. In developing countries, public organizations supported by the Royal Family or the national leader are often involved in social development projects, so a useful approach would be to improve the planning and management aspects of these organizations. Active involvement by private corporations, an experience unique to Japan, also has potential for application by developing countries.

The period of economic growth in Japan saw the operation of a "company centered society." In order to secure a high quality workforce, lifelong employment was the rule for major corporations. The companies looked after their employees in terms of health, family life including family planning, and even their post-retirement livelihood. The government also supported this system through preferential arrangements<sup>13</sup>. Although the life-long employment system in Japan is vanishing, corporations constitute a powerful social resource, and measures involving such a resource in some way to improve public health and medical services in countries experiencing a period of growth. In Thailand, Japanese companies maintain the same standards for occupational health and safety as in Japan, considerably advanced in comparison with local concerns<sup>14</sup>. In this way, Japanese companies demonstrate to the local businesses the fruits of

<sup>12</sup> Shimao (1996) *Waga Kuni no Kekkaku Taisaku* [Tuberculosis Control in Japan], JATA Books No.9. and Obayashi, Michiko (1989) *Josanpu no Sengo* [Midwives after the War], Keiso Shobo.

<sup>13</sup> Asahi Newspaper Corporation eds (1995) *Kaisha Taikoku - Sengo Goju-nen* [Company's Superpower - for 50 Years after the War], Asahi Bunko.

<sup>14</sup> Japan International Cooperation Agency (2000) Evaluation on Specific Topic in FY1999: Assistances for People with Disabilities in Thailand.

Japanese initiatives. When measures such as preventive vaccinations and health checks are part of the national system, it is important that companies take the opportunity to provide them for their workers and their families. Japan is also well placed to offer assistance in this area.

(5) Centered on Professional Women Approach

Almost all developing countries have a system of public health nurses, but they are very few in number. They are therefore unable to provide outreach services, such as those provided by Japanese public health nurses during the period of “Japan-style Community Health,” and provision of services finely attuned to the needs of their local community is difficult. Many developing countries train and enlist health volunteers (or health workers), supervised by public health nurses, to provide health services directly to the community. The training of these volunteers is essential for the improvement of public health and medical services in developing countries.

In Japan, professional women such as practicing midwives, public health nurses, and livelihood extension workers have contributed greatly to the provision of public health services, health education, improvements to the living environment, and increased living standards at the community level.

Practicing midwives were present in Japan as private service providers since the Meiji Era, around 1868, when they were known as “*sanba*” or traditional birth attendants. The Meiji Government accredited midwives as medical service personnel. During and soon after the Second World War, midwives underwent further education in maternal and child health and family planning, in order to participate in awareness campaigns. Public health nurses began as non-profit activities in the Taisho Era (1912~1926), providing home visit services. The government established public health nurses

as a profession at the same time as that of public health centers, as major providers of community-based health services. Livelihood extension workers were established as professional workers for modernization of rural farmers by order of GHQ, using the point of view of local community, developed and applied a problem-solving approach, now called the Participatory Rural Appraisal (PRA) Method.

During the pre- and post-war periods of poverty, a lack of knowledge concerning public health, and difficult access to medical institutions, a common feature of these professional women is that they felt that the task of “protecting the lives of the residents of their communities” fell to them, and worked tirelessly at the grass-roots level due to their sense of mission. They did not provide a standardized service as dictated from above, but rather considered the basic needs of the community as members of that community and particularly as women, and responded to those needs. Another important common characteristic is that they did not seek financial assistance from outside, but sought to respond to perceived needs using only resources within the community. Practicing midwives, public health nurses, and lifestyle extension workers enjoyed high status within the community, and were well rewarded financially, and these two points should not be overlooked in applying this experience in developing countries.

The activities of these professional women contributed greatly not only to public health, but also to improvements in living standards, and to the independence of local society. These can also be considered a result of the empowerment of women. Some of the factors that made women the driving force behind these successes are: 1) Women used to discrimination are secretly aware of the possibility of reform<sup>15</sup>, 2) Women are generally more interested in childbirth and family health matters, 3) Women are in charge of food,

<sup>15</sup> Oikawa, Kazuo (1987) *Soncho Arika* [A Great Village Mayor], Shincho Bunko.

clothing and shelter within the household, matters intimately related to health problems, 4) Women spend their lives within the local community, can readily identify problems, and act to correct them<sup>16</sup>, 5) In general, they have few social impediments (employer/employee relationships within organizations), 6) Women are by nature generally more willing to enter into a new activity without concern for the possibility of failure

It should be possible in developing countries to actively recruit women as health volunteers (health workers), to play a major role in community-based health. For example, as part of assistance for the DOTS strategy by JATA in Nepal, ordinary housewives have detected a case of tuberculosis in their neighbors, delivered his medicine every day and overseen its administration, and effected cures. This has further empowered the woman, given her the confidence "I managed this cure," and earning the respect of the community. She has developed into a project leader, in charge of thousands of volunteers<sup>17</sup>. When women become major players in community-based health programs in developing countries, it is important to consider such points as what changes affect women, what obstacles there are to participation by women, and what will promote activities by women.

#### (6) Participation by Scientists and Researchers

Little involvement is seen from scientists and researchers in policy and technical matters in the field of public health and medical services in developing countries. The reasons for this include the small numbers of scientists and researchers themselves, insufficient funding, and a lack of opportunities for contact with the administration. Improvements in public health and medical services require policy and technological development with

a sound scientific basis, through the active participation of scientists and researchers.

Review of the Japan's history shows that many scientists and researchers contributed to the achievement of the present system. For example, in the field of family planning researchers were involved in policy decisions, and through action research in model villages, they developed the model adopted nationwide. In the tuberculosis control campaign, pathologists, microbiologists and clinicians were active from the public health viewpoint, and played an important role in research, collection of information, evaluation of policy, lobbying politicians and administrators, and awareness campaigns to the general public<sup>18</sup>. In the campaign to control parasitic diseases, the regional parasitic disease control associations contributed in technical areas and awareness campaigns with assistance from local universities.

In the field of occupational health, attempts to regulate occupational health and safety brought strong opposition from corporate management. This was overcome through epidemiological research that established the grounds for the new legislation. Another example is, through activities in conjunction with rural residents, the Medical Director of the Saku Central Hospital developed the new field of rural village medicine, and has continued to this area.

In developing countries as well, scientists and researchers should recognize the important role they can play in improving public health and medical services in their own countries, and develop ways (problem recognition and problem solving, collaboration with other players, e.g. administrators and other experts) in which they can fulfill that role. Japan can provide assistance in the training of scientists and researchers, by raising awareness and skills through technical cooperation

<sup>16</sup> Ishikawa, Nobukatsu (2003) "Primary Health Care" (Sixth training course and lecture for experts about Tuberculosis control etc, September 17, 2003)

<sup>17</sup> *ibid.*

<sup>18</sup> Ishikawa, Nobukatsu (1999) "*Nihon no Kekkaku Taisaku ni Manabumono* [Lesson from Japan's Tuberculosis Control] Public Health, Vol. 63, No.3.

project with Japanese experts, training in Japan, and academic exchanges between universities.

#### (7) Universal Health Insurance Coverage

Lack of accessibility to healthcare services has become a major issue in developing countries. Through universal health insurance coverage, Japan has achieved a system that guaranteed equal accessibility to medical facilities, whether publicly or privately owned, to anyone with little concern over cost. Universal health insurance coverage was achieved in Japan at a relatively early stage. The National Health Insurance Law of 1938 ushered in the first era of universal health insurance coverage, at a time when tuberculosis was rampant, with the recognition that "Disease causes poverty." It is also worthy of note that since over half the population at this time were not formally employed (workers in agriculture or the informal sector), the system of universal health insurance coverage was uniquely developed based on small-scale community-based health insurance. The pre-war health insurance system was all but destroyed by the Second World War, and its reimplemention was regarded as a major aim of the post-war national reconstruction. Universal health insurance coverage was again achieved 16 years after the end of the war. In this way, through recognition that "disease causes poverty," the government made a strong commitment towards creation of a health insurance scheme during a time of poverty, and priority was given to initiatives in this area despite financial constraints. This suggests that developing countries can also afford to assign a high priority to health insurance in their policy deliberations.

From Japanese experience, two preconditions for the achievement of universal health insurance coverage are realized, which are strong governmental commitment, and the capacity of an administrative body (or some other public institution) It should also be considered to introduce universal health insurance coverage until the economic strength of the government and people have reached a certain level, so a realistic approach would be to adjust the introductory scale

according to the economic stage in each country, and progressively widen the scope of the coverage. It should be also take into consideration. that a high proportion of the people in developing countries are employed in the informal sector. How to incorporat these huge population into any scheme is also a challenge. Japan's early experience of community-based health insurance schemes should be applicable in this challenge.

#### (8) Lessons Learned from Failures — Dealing with Environmental Pollution and the Aging Society

Although Japan now boasts the world's highest standard public health system, there are also a number of regrettable areas from the past. Since the Meiji Era, around 1868, the Japanese system of public health and medical services has been under central control through a relatively stable bureaucratic system. But it must be said that the response of the administration is slow, in that it takes some time between a need arising until the systems, including legislative measures, are put in place to meet that need. In practice, in areas such as the public health nurse system and maternal and child health programs, services have emerged from within the private sector in response to needs that have arisen, and the administration has then acted to expand and systematize those services.

One area where the government response was particularly delayed, with regrettable consequences, was environmental pollution. Other areas where challenges remain to be faced are the formation of a public debate over reproductive health/reproductive rights, care in the community as part of emergency medical care, and occupational health and safety programs in small to medium enterprises.

Following the achievement of universal health insurance coverage, the numbers of medical institutions and personnel were expanded at an accelerated rate in the 1960s along with the advanced economic growth at the time. Concerns over a possible over-supply emerged at the start

of the 1980s, however, and it must be said that long-term planning at that time was overly optimistic concerning requirements for medical services. Long-term forecasts were also overly optimistic concerning financing for health insurance, which are now in crisis brought about by the aging society, declining birth rate, increasing medical costs, and the prolonged economic downturn. There are also concerns over the quality of medical services. As Campbell et al. pointed out in 1996, the delay of developing a referral system from primary to tertiary institutions. Even now patients flock to major hospitals on initial presentation, and complain of “a three hour wait for a three minute consultation.” Examination and treatment methods in Japan are also often criticized for over-prescribing medications, for looking at the data not the patient, their in Japan with these criticisms in mind, service providers at the medical frontline should have respect for human dignity, and initiatives regarding informed consent (explanation and consent for medical treatment) in recent years. The concept that the patient makes the decisions regarding medical treatment<sup>19</sup> has finally entered the doctor-patient relationship, at this point in Japan's long history of modern medicine.

The background to these problems is that, since the introduction of universal health insurance coverage, issues that should be dealt with through social welfare programs have all been included under the umbrella of medical services. This refers in particular to the care and welfare of the elderly and disabled. Services aiming to improve their quality of life were until the 1980s almost all part of the medical system<sup>20</sup>. This distortion evidenced itself in social admissions to hospitals, worsening the quality of

care and increasing medical costs. The long-term care insurance system for elderly was implemented. Its effect on quality of care needs to improve. There is also an urgent need for a fundamental overhaul of the pension system, in response to the ever-accelerating decline in the birth rate, and population aging. Many analysts notice that anxiety concerning the entire social security system on Japanese people led to the recent downturn in economic activity. This reflects the present situation, whereby “the Japanese social security system is well suited to a ‘developing country model,’ and accordingly the response to a mature society is extremely slow”<sup>21</sup> (see Box 12-2).

These regrettable areas of Japan's experience provide two universal lessons. Firstly, initiatives in the field of public health and medical services must commence with respect for human dignity. If healthcare systems, initiatives in occupational health, or programs against environmental pollution are undertaken with respect for human dignity, then the correct course of action will become naturally obvious. To put this idea into practice, the administration of public health and medical services must be democratic in nature. This in turn requires the establishment of administrative services based on genuine decentralization. The second lesson is related to the social security system. Japan developed one model for a developing country social security system, but the response to a mature society was delayed. This shows the importance of a long-range vision based on forward planning. Countries contemplating the introduction of basic health insurance and pension systems might find this lesson useful. In countries that have already achieved a certain standard of public health and medical services, and are in the process of

<sup>19</sup> Murakami, Yoichiro (1996) *Niju-seiki no Nihon (9) Iryo-Koreishakai he mukatte* [Japan in 20th Century (9) Medical Care - Toward Aging Society] Yomiuri Shimbun Sha.

<sup>20</sup> Kawakami, Takeshi and Kosaka, Tomiko (1992) *Sengo Iryo-shi Josetsu* [Preface on the History of Medical Care after the War], Keiso Shobo.

<sup>21</sup> Hiroi, Yoshinori (1999) *Nihon no Shakai Hoshō* [Social Security of Japan], Iwanami Shinsho.



developing health insurance and pension systems, the challenge is to establish a sustainable social security system. Almost all countries are expected to experience aging of their population at some time in the future, so to ensure high quality lifestyles for their people over the long-term, a balance needs to be maintained between economic development and improved quality of life (QOL).

### 3. Further Areas Requiring Study

#### (1) Wider and Deeper

The aim of this study was not simply to introduce Japan's experience in developing the field of public health and medical services, but also to elicit those initiatives intended to improve the health standards of the people of Japan "that can be of use to the people of developing countries. In particular, we included characteristic elements of the Japanese experience that have been of interest to people from developing countries, and in our analyses concentrated on those elements that will likely be of benefit to those developing countries and regions particularly lacking in medical resources. As a result, we identified a "community-based health approach" that utilized community human and material resources to the fullest, in areas such as maternal and child health, family planning and infectious disease control. We not only investigated pre-determined themes, but presented a summary of the overall experience of initiatives that improved the health standards of the population, with the emphasis on the way in which health issues changed over time, and how public health and medical services responded to those changes.

As a result, there were inevitably a number of themes that we were unable to cover, or investigate in depth. These will require in depth coverage in a future study. Some of the themes straddle a number of fields, and should be looked at from a viewpoint other than public health and medical services at another time. For example, the

fields of environmental sanitation, environmental pollution, occupational health, and the social security system, from Phases IV and V dating from the period of advanced economic growth onwards, should be analyzed from other viewpoints. Japan's experience in these fields, including a number of areas for regret, contains a number of lessons for newly industrialized countries in Asia.

In our analyses, we were unable to fully analyze correlations with factors such as economic development and socio-cultural backgrounds. Economic strength and socio-cultural background must be considered before a public health and medical system can be introduced, so future studies should conduct in-depth analysis of these factors.

In addition, the efforts of public health nurses and researchers out in the community, working selflessly to solve problems, played a large part in improving Japan's public health and medical services, whereas in developing countries there is usually a shortage of such personnel. A definitive study of the fundamental issues that make it difficult in developing countries to train and retain these human resources that Japan has produced so successfully, still needs to be performed. International cooperation to aid developing countries in training and keeping these important personnel is considered an important area in developing independence within the emphasis on ownership, and further study is required in this important area.

#### (2) Adapting to the Situation in Developing Countries

The field of public health and medical services is closely related to the nations history, culture and value system. Its application should suit its politico-economic situation of that country. Therefore, introduction of a new system, or reform of the present one, should be preceded by careful consideration of the cultural, social, economic and political background of the particular developing country. With the influence

**Box 12-1 Feasibility of Application of Japan's Experience in Public Health and Medical Systems to Developing Countries**

A number of characteristics of Japan's experience correspond quite closely to recommendations concerning establishment of public health and medical systems in developing countries in the 1993 World Development Report "Investing in Health." The main recommendations in this report are given below.

- \* Governments should drastically reduce their investment in specialized and tertiary medical services, due to their low cost-effectiveness.
- \* Instead, more funding should be allocated to public health initiatives, such as infectious disease control programs.
- \* Emphasis should be given to the provision of essential clinical services.
- \* In financing a medical system, a system that covers the entire population is more efficient than one that only covers the poor (the latter causes problems with maintaining political support, and the cost of determining eligibility).
- \* It is more efficient to utilize private sector providers of medical services as much as possible.
- \* No effort should be spared in providing basic primary education to girls in particular (a mother's influence is particularly great in determining the family lifestyle, in a variety of ways related to food, childbirth and medical treatment).

In 1999, Hiroi concluded, "Japan adopted a system, perhaps not deliberately, but in terms of results, that can be called the ideal 'healthcare system for a developing country'. This is reflected in the often admired 'high performance Japanese medical system (low medical costs and high health indices)'." In 2003, Hiroi further suggested, "Accordingly, what is now required is a model that objectively formularizes the strengths and weaknesses of Japan's healthcare system, based on international comparisons such as the above. This could be compared with the individual situation of a given developing country, to determine the most desirable way of applying the Japanese experience."

Source: Hiroi, Yoshinori (1999) *Nihon no Shakai Hoshō* [Social Security of Japan], Iwanami Shinsho., Hiroi, Yoshinori (2003) "Characteristics of Japan's Experience concerning the Development of its Social Security System], Institute for International Cooperation, JICA., *Development of Japan's Social Security System*.

of globalization, the socio-economic situation and the nature of the health challenges faced by developing countries today are considerably more complicated and varied than those Japan dealt with in the past. Simple "formularization" of Japan's experience cannot be expected to yield any useful principles.

With the above in mind, in the future we would like to see analyses conducted of what elements of Japan's experience can be applied in

what sort of countries, and how the Japanese experience should be rearranged to suit the situation of that country. These analyses could then be delivered to healthcare workers in the frontline of that developing country.

(3) Accumulating Experiences in International Cooperation

Some 37 years have already passed since the first cooperation in the field of public health and

<sup>22</sup> "International Family Planning Training," a project that takes trainees in the population field.

medical services by Japan's Official Development Assistance (ODA) in 1967<sup>22</sup>. During that time, a number of international cooperative projects have incorporated uniquely Japanese approaches, as well as the opinions of a variety of Japanese experts. There have not been any studies of their relationship to Japan's experience in a systematic way, however. In this chapter, we briefly introduced several successful examples of cooperation in "2-2 Characteristic of Japan's Initiatives that Can be of Use to Developing Countries," but this was by no means an in-depth analysis. We should now seek the cooperation of

Japanese experts with actual experience and knowledge of cooperation in developing countries in making a detailed analysis of the application of Japan's experience in overseas cooperation, regardless of success or failure. Extrapolating from these mechanisms, we should analyze success factors, inhibitory factors, and external criteria, and list some points that require consideration in the application of Japan's experience in cooperation with developing countries. It is also needed to create information dissemination system where anyone requiring information can access it, any place and any time.

## Appendix. Japan's Experiences that May be Applicable in Cooperation with Developing Countries

In the table below, we extracted initiatives in each field covered in Part II that may be applicable in developing countries. We then classified the main players for each initiative and the phase in which it was mainly implemented, and categories of Japan's initiatives which are described in 2-2 of this chapter.

N.B. 1: "Most important phases" refers to the phases in Japanese history in which the initiative that may be applicable to developing countries was implemented. The following time divisions from Part I are used:

*Phase I: Acute infectious diseases control (1868~1919)*

*Phase II: Chronic infectious diseases control and formation of maternal and child health services (1920~1945)*

*Phase III: Restructuring the health administration (1946~1960)*

*Phase IV: Expanding medical services (1961~1979)*

*Phase V: Challenge of an aging society (1980~present)*

N.B. 2: In the "Main players" column, "Community" refers a variety of participants in community-based health, including public health centers, public health nurses, and local residents.

N.B. 3: "Characteristic initiatives" refers to the following, outlined in "2.2 Characteristic Japanese initiatives of Chapter 12 that can be of use to developing countries" in this chapter.

- 1: Government's commitment
- 2: Policy formulation based on reliable statistics and surveys
- 3: Community-based public health approach (collaboration between government, the community, and nonprofit organizations)
- 4: Private organizations involvement (community groups, nonprofit organizations, corporations)
- 5: Centered on professional women approach
- 6: Participation by scientists and researchers
- 7: Universal health insurance coverage
- 8: Lessons learned from failures – dealing with environmental pollution and the aging society (areas for Japanese regret)

Areas covered in each Chapter of Part II	Most important phases	Main players	Characteristic initiatives
<b>● Maternal and child health</b>			
Appointment of midwives and public health nurses	II, III	Women	5
Promotion of community participation		Private organizations	3, 4
Maternal and Child Health Handbook System		National governments, community	1, 3
Provision and improved quality of birthing places		Local government, women	3, 5
Collection of maternal and child health statistics		National governments, community	1, 2, 3
<b>● Family planning</b>			
Approach emphasizing existing needs and the individual	III	Community	3
Establishment of a system of collaboration between government, academia and private sectors		Private organizations, Academia	4
Recruitment of midwives, public health nurses and general nurses as family planning workers		Women	5
Activities of private organizations		Private organizations, Academia	4, 6
Social marketing of contraceptive devices		Private organizations	4

Areas covered in each Chapter of Part II	Most important periods	Main players	Characteristic initiatives
<b>● Infectious diseases control</b>			
○ <b>Tuberculosis control measures</b>			
Governmental commitment	II, III	National government	1
Appropriate patient management and intensive treatment (function of public health centers, activities of public health nurses, comprehensive approach to tuberculosis control measures in the home)		Community	3, 5
Supervision and assessment based on a system of patient registration and notification		Community, women	2, 3, 5
○ <b>Parasitic diseases control</b>			
Problem recognition and activity of enlightenment	III	Private organizations	4
Activities of community groups		Private organizations	4
Collaboration with academia		Academia	6
Linkage with school health programs		School community	3
Approach to Public health with parasitic diseases control as the entry point		Community	3
○ <b>Vaccination</b>			
From compulsory to voluntary	III	National government	1
Providing vaccinations using existing service providers		Community	3
Providing vaccinations free of charge		National government	1
<b>● Community-based health</b>			
Despite limited medical facilities and personnel: •System of provision of community health services centered on public health centers •Appropriate placement of public health workers •Active participation by local residents •Collaboration between a variety of organizations	II, III	Community	3, 5
Scientific approach to problem solving		Community, Academia	3, 6
Community health and a multi-sectoral approach		Community	3
<b>● School health</b>			
Parasitic diseases control	III	Local government, private organizations	3, 4
School lunches		National government	1
Liaison between schools, families and the local community		Community	3
<b>● Emergency medical care</b>			
Road trauma care	IV	National and local governments	1
Emergency obstetric and pediatric care (pre-emergency care in the community)	III	Community	3
<b>● Environmental pollution control measures</b>			
Reasons for delayed response to environmental pollution	IV	National government, private organizations	8
Advocacy movements for pollution victims and media reporting		Private organizations	4
Legislation, establishment of a responsible authority, provision of funding, and preferential taxation		National government	1
Establishment of a regulatory system, use of the courts		National and local governments	1
Pollution surveys and research		National government, Academia	1, 6
Environmental assessments		National and local governments	1
Education of environmental pollution control personnel		National and local governments, private organizations	1
Environmental pollution education		Private organizations	4
<b>● Occupational health</b>			
From government directive to worker-management partnerships	IV	National government, private organizations	1, 4
Participatory model of occupational health and safety		Private organizations	4
On site occupational health and safety measures		Private organizations	4
Promoting epidemiological research		Academia	6
Occupational health awareness and education campaigns		National government	1
Occupational health measures in small and medium-sized enterprises		Private organizations	8
<b>● Public medical insurance</b>			
Preconditions for success	IV	National government	1, 7, 8
Scale at introduction, and phased expansion (community health insurance system)		Local government, private organizations	1
<b>● Expansion and maintenance of a system of provision of medical and public health services (Part I)</b>	All phases	All players	1, 8