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Minireview

Human resource development for public health workers in Japan: A minireview

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Abstract

I outlined trends in human resource development for public health workers in Japan along with changes in health issues from the early stage to the present day, and considered future issues. After the Second World War, it could be said that the establishment of two public health centers (urban and rural types), as on-site training sites, in the (former) National Institute of Public Health had been an advanced initiative. In order to add education and training to respond to diversifying new public health issues including health crisis management, we developed and provided training programs according to the competency clarified by analysis. From now on, I think it will be a challenge to develop human resources capable of flexibly responding to rapidly changing health problems in accordance with changes in the times with a scientific perspective.

Keywords: human resource development, public health workers, national institute of public health, public health center, competency

Introduction

Human resource development for Japanese public health workers was done together with the creation of a new country during the process of modernization after the Meiji Period (1868-1912). Since World War II, based on the public health introduced from the United States and the new Constitution, the foundation of human resource development for public health workers, that is, the former National Institute of Public Health trains senior professionals of municipalities, was made. Subsequently, with changes in the socio-economic situation, municipal public health workers are required to tackle new issues such as health crisis management and responding to changes in population structure and disease structure. In this paper, I give an overview the history and consider future issues, of human resource development for public health workers in Japan.

Period before and after World WarII

Before World WarII

After Meiji Restoration (1867-1889), measures against acute infectious diseases such as cholera and smallpox became an important issue of public health in Japan. With the development of the economy in the 20th century, chronic infectious diseases such as tuberculosis and infant mortality emerged as new problems. Although the local sanitation administration was under the jurisdiction of the police by bureaucratic reform and strengthening of the security system, hygiene education for citizens began to be carried out by medical professionals, etc. Since around 1914, the health consultation centers, which were the prototype of the public health centers, were established in various places [1,3].

Due to the Great Kanto Earthquake that occurred in 1923, Tokyo and neighboring areas suffered great damage. As part of disaster area recovery assistance, in 1937, the former National Institute of Public Health, as the public health technician educational institution, the Urban Public Health Center, and the Rural Public Health Center were built by an offer from the US Rockefeller Foundation. In addition, the former National Institute of Public Health conducted not only lectures but also field training with the latter two facilities as training sites [4]. It can be said that the establishing practical training sites in educational institutions for public health was an advanced case not only domestically but also globally.

After World War II

With the defeat of World War II, the Japanese society became confused and hygiene conditions worsened. With strong guidance and assistance from the General Headquarters: GHQ / Supreme Commander for the Allied Powers: SCAP, fundamental reform of Japan's political, economic and society was conducted. Crawford · F · Samus, the director of the Public Health and Welfare Bureau of GHQ / SCAP, took a policy that emphasizes the livelihood rather than military medicine, and hygiene departments were established in each prefecture, as part of establishing the system of sanitation administration. In 1947 the former public health center law was completely revised (Hereinafter, it is defined as "New Public Health Center Law"), its purpose and object were set as shown in Table 1.

Technical education at the former National Institute of Public Health was to be conducted mainly by professional job category.

From “new public health center law” to “regional health law”

Public health measures centered on health checkup

In 1965, the "Maternal and Child Health Law" aimed at preserving and promoting maternal as well as the health of infants and young children was enacted, and in 1982 aimed at preserving the health of the citizen's old age and ensuring adequate medical care "Health Law for the Elderly" was enacted. On the basis of these laws, public health activities under the New Public Health Center Law were conducted focusing on health examination. Technical education at the former National Institute of Public Health was mainly conducted by profession.

Public health center reorganization initiative

In the mid-1950s, tuberculosis and acute infectious diseases decreased and infant mortality improved as a result of the spread of sanitary thought, progress of chemotherapy and improvement of living environment. However, the municipal merger promotion law was conducted in 1953, and interpersonal public health services had been decreasing. Although the lives of the people had further improved by high economic growth and regional development, adult diseases (lifestyle diseases) and pollution had become serious problems with urbanization and an increase in the number of elderly people.

With the oil shock of 1973 as an opportunity, Japan had shifted from the era of high economic growth to the era of stable growth and it was required to respond to a new era. In 1978, the Ministry of Health and Welfare reviewed the policies with the following three pillars:

① promotion of health promotion throughout life,
② improvement of infrastructure for health promotion,
③ spread of awareness of health promotion.

At the end of the 1980's, issues such as changes in disease structure and the arrival of a super aging society had been accumulating. The Ministry of Health and Welfare Community Health Future Conception Study Committee discussed about the establishment of a specific health center for each secondary medical zone, etc. In 1989 the "Regional Health Future Conception Report" was issued, Promotion of Cabinet Order Health Center and Health and Welfare Integrated Service Center for each municipality were proposed together.

Following such a reform plan of public health centers, the New Public Health Center Act was amended to the Regional Health Law in 1994. The main background of the establishment of community health law was the following five points:

① rapid population aging,
② birth rate declined,
③ chronic illness increase,
④ residents’ needs diversification,
⑤ increasing residents’ awareness.

In addition, "public health centers" were required to strengthen functions as a regional, professional and technological base, and the establishment of health centers in "municipalities" was legalized [5,6].

Human resource development based on competency

Who will keep the public healthy?

In the beginning of the 21st century, the US proposed an early view of health promotion toward decades ahead [7]. U.S. public health workers needed additional training to meet new challenges posed by globalization, medical advances and an aging and increasingly diverse population, says a new report, titled Who Will Keep the Public Healthy? The 1988 IOM report, The Future of Public Health, proclaimed public health to be in disarray and prompted national discussion about the status of public health, including the public health workforce. The IOM report examined the education of public health professionals. Report recommendations ranged from establishing partnerships between schools of public health and other academic disciplines, local and state health departments and community organizations, to calling for the addition of public health training to medical and nursing school curricula and increasing federal funding for public health research.

"Human Resource Development Based on Competency" in Japan

Also in Japan, it was obviously necessary to add education and training to public health experts to cope with diversifying new public health issues. Particularly in 1998, measures against emergency that caused health hazards were one of the important subjects of public health administration due to the "terrorist attack on the subway" which was a terrorist attack by chemical substances and the Great Hanshin Awaji earthquake hit. The public health center was required to fulfill the function as a regional health crisis management base in each region (Figure 1).

Tachibana et.al. studied necessary matters in order to conduct effective training for local public health experts. A director of a public health center, which is the base of health crisis management in each area, is an organization manager and a doctor. First, we decided to clarify the "role" and "ability" of the director of the health center, which is required for health crisis management in the area. We analyzed 6 major public health emergencies in Japan by using the Incident Analysis Method, based on the “Medical SAFER Technique,” to identify “competencies” required of public health center directors in public health emergency responses. The results are shown in Table 2 and Table 3 [8]. In addition, we identified the competency for health crisis management by job category and job title, required by all public health workers by the Delphi method [9]. Based on the analysis results, training programs were developed at the National Institute of Public Health and was provided to technical experts in local governments [10,11].

Future issues of human resource development for public health workers in Japan

In Japan, the aging population and the declining population are simultaneously progressing at the same time. Looking at the trend of the population structure, the increase in the population of the elderly increases rapidly until 2025 (the population over 75 years old + 142.0% / Y.2000 - 2025), but the increase in the population of the elderly is expected to become gentler in 2025 - 2040. For this reason, the issue on the population structure after 2025 is a new aspect of rapid decline in population of an

Table 1. Purpose and object of the old vs the revised public health center law (revised 5th September, 1947) (Quoted from reference [1]. The author reorganized partially.)

(Old) Public Health Center Law (Act No. 42) April 2, 1937		**(Old) Public Health Center Law (Act No. 42) April 2, 1937**	
Article 1	The public health center shall make necessary guidance for health in local areas in order to improve the posture of citizens	Article 1	The public health center shall make necessary guidance for health in local areas in order to improve the posture of citizens
Article 2	In public health centers, guidance is given on the following matters	Article 2	The public health center conducts guidance and business necessary for the matters specified below.
1	Matters concerning the dissemination of sanitary thought	1	Matters concerning the dissemination and improvement of sanitary thought
2	Matters concerning improvement of nutrition and hygiene of food and drink	2	Matters concerning demographic statistics
3	Clothing, housing and other matters concerning environmental hygiene	3	Matters concerning improvement of nutrition and hygiene of food and drink
4	Matters concerning hygiene of pregnant women and infants	4	Matters concerning housing, water supply, sewerage, waste treatment, cleaning and other environmental hygiene
5	Matters concerning prevention of disease	5	Matters concerning public health nurses
6	Other matters concerning promotion of health	6	Matters concerning improvement and promotion of public medical business
		7	Matters concerning maternal and infant and senior hygiene
		8	Matters concerning dental hygiene
		9	Matters concerning hygienic tests and inspections
		9-2	Mental health matters (Added at the time of revision of the mental health law of 1965)
		10	Matters concerning prevention of tuberculosis, venereal disease, infectious diseases and other diseases
		11	Other matters concerning improvement and promotion of public health in local areas

Figure 1.
Disaster and Health Risk Preparedness in Japan

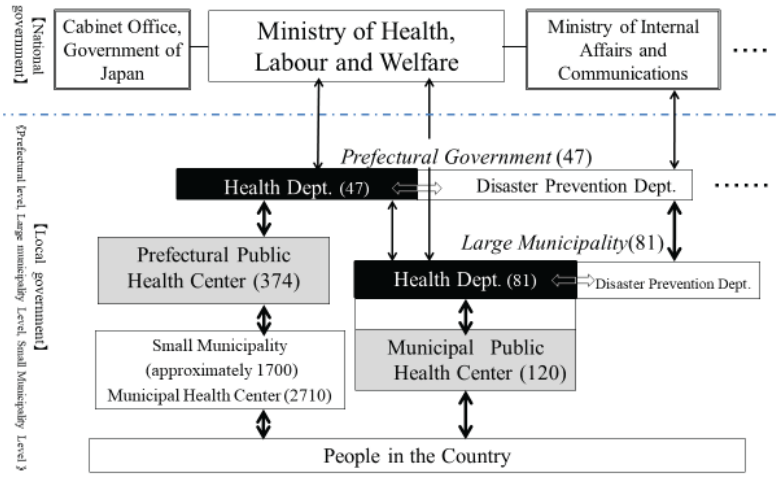

Figure 1. Disaster and Health Risk Preparedness in Japan: Public health administration and disaster and health risk preparedness (DHRP)

Table 2: Responses required of public health center directors can be generalized into 15 elements (i) – (xv) [8])

(i) Estimation on switch from a peacetime system to an emergency system
(ii) "Technical knowledge about medical and public health sciences", "knowledge of administration techniques", "knowledge about situations within the jurisdiction" and "sensibility" (i.e. a fund of knowledge and experience to estimate the impact)
(iii) Power to perform prevention countermeasures against health injury/damage spread (often at the same time as the initial investigation)
(iv) Ability to collect information necessary for impact estimation
(v) Power to perform the initial stage of an epidemiological investigation
(vi) Arrangement of, coordination with, and management ability of organizations engaged in technical investigations and surveys (local institutes of public health, the central government, CDC, etc.)
(vii) Power to control the internal organization (decisions, instructions)
(viii) Arrangement and coordination ability among outside organizations (medical associations, neighboring municipalities, the central government, etc.)
(ix) Ability to set the targets for countermeasures and explain grounds for decisions inside and outside of one's own organization
(x) Establishment of a system with clear responsibility and a simple decision-making process
(xi) Ability to promptly explain about necessary matters to victims, neighboring residents, media or politicians, based on precise medical knowledge and a scientific viewpoint
(xii) To let others know about the lessons learnt from countermeasures from a positive perspective, not with a passive attitude.
(xiii) Actions for PTSD and to protect the most vulnerable in society
(xiv) Power to achieve the realization of systematic improvements for residents after taking countermeasures
(xv) Ability to summarize a series of countermeasures in the form of reports and articles

Table 3. Summary of the "Competencies" of Public Health Center Directors for Public Health Emergency Responses by time intervals [8].

Phase	Roles characteristic of public health center directors	Competencies
"prevention of incidence of health crises"		(ii) (iii) (iv)
"preparation for incidence of health crises"	1. Competency to estimate the impact on local health from the "first notification" of the occurrence and the "initial investigation".	(ii) (iii) (iv) (v) (vi)
"correspondence of health crises"	2. Management competency for thorough investigation of causes 3. Management competency of organizations performing countermeasures 4. Competency to promptly provide precise information on facts found, countermeasure policies, etc., inside and outside ones jurisdiction and to explain them; competency to be a spokesperson	(i) (ii) (iv) (v) (vii) (viii) (ix) (x) (xi)
"recovery from a disorder"	5. Follow-up after taking countermeasures; Competency to create systems enabling countermeasures against recurrences of incidents to continue and to achieve social consensus	(ii) (x) (xi) (xii) (xiii) (xiv) (xv)

active working generation, and it will be required to respond.

In Japan, in a "mature society," that is, "a society that can aim at mature death [12] by preventing premature death," high quality of measures and human resource development of public health will be required. Tachibana suggested a new "definition of health for a mature society" regarding health policy in "care focused mature society" and proposed a health promotion vision to people with disabilities along with improvement of information accessibility [13,14]. From now on, it will be a challenge to nurture talented persons who can flexibly respond to the previously mentioned health problems, which change rapidly in response to changes in the times, with a scientific perspective.

Conclusion

I outlined trends in human resource development for public health workers in Japan, from the dawn to the present, along with the trends in health problems in each era. From now on, I think it will be a challenge to develop human resource capable of flexibly responding to rapidly changing health problems in accordance with changes in the times with a scientific perspective.

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Conflicts of interest

The author has no financial conflicts of interest to disclose concerning the study.

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