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## A review of the trend in facilities for health services in the community.

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## Abstract

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**KEYWORDS:** health station ; health center ; health service.

— REVIEW —

**A REVIEW OF THE TREND IN FACILITIES FOR  
HEALTH SERVICES IN THE COMMUNITY**

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*Abstract.* After the Second World War, the field of medicine has changed remarkably in Japan. A comprehensive health and medical care system has been organized to meet the increasing needs and demands for health and medical care services. Health centers have played an important role in promoting health care activities in the community. The authors describe the development of health centers and other health care facilities in Japan. The authors propose that it is necessary to build a new health facility specifically designed for public health nurse activities, termed a "public health nurse station". The authors also describe the status of the health care facilities in service and the activities of the stations and evaluated them. It is concluded that the stations have brought many changes in the field of health and medical care ; moreover that the station should not become a substitute for a health center but should be a facility for public health nurse activities in a community. Health centers should also play important roles for comprehensive medical services in the future.

*Key words :* health station ; health center ; health service.

After the Second World War, various kinds of social insurance schemes were established in Japan. The whole population has been covered by either one of the medical insurance systems, since 1961, when the scheme for comprehensive medical care insurance system was established.

The demands for medical and health care services have changed quantitatively and qualitatively (1, 2), because of rapid changes in socioeconomic conditions due to industrialization and urbanization as well as changes in the age structure of the population and the incidence of various diseases.

The existing medical and health care delivery systems cannot meet current

demand although there exists various medical insurance schemes for the entire population. For example, there are still many districts in rural and mountainous areas where routine medical care and physicians are not available for the residents in the community. Moreover, emergency medical care services and medical care services during the night are not always available in many urban areas. The national cost of medical care has been increasing each year. Accordingly research into the causes of this situation is urgently needed.

Increases in the percentage of the aged in the overall population and changes in the pattern of disease incidence have created many new medical and health problems. It is recognized generally that the health care and medical care systems, which rely primarily upon neighborhood health centers and private medical care facilities respectively, have not been adequate to deal with these problems.

To solve the current problems many solutions have been proposed. The Japan Medical Association (3) has proposed a plan concerning community medical care activities while each political party has formulated proposals to improve the health insurance system. While these proposals are being considered, it is necessary to emphasize the importance of establishing a comprehensive health care system which integrates medical services into the continuity of medical and health care. Coordination between the public health and curative sectors is required and necessary to establish adequate health care services as is presently being done in many European countries.

In the public health sector, the Ministry of Health and Welfare has proposed reorganization of health centers which are unable to effectively meet the changing and diversified health needs in the community because of the shortage of health workers, especially public health doctors. In the proposal, the national authority intends that personal health services should belong to the responsibility of local governments (city, town, village) instead of the prefectural (state) and central governments and that centralization of the administrative function of health centers such as inspection and field supervision of sanitary operations should be promoted.

Under these circumstances, the national budget for construction of "a municipality health center" (shi-cho-son health center) has been brought into force since 1978, while different kinds of facilities for health care activities have already begun work in the community.

The aim of this paper is to review recent trends of these facilities, especially health centers, which have been the main health service agencies in Japan. We will describe the need for a facility for public health nurse activities and evaluate the current status of existing facilities.

## HISTORY AND BACKGROUND

*History of Health Centers*

In Japan, there has been a sharp distinction between the fields of medical and health care systems. The "medical care system" provides curative services at hospitals and clinics for patients suffering from various diseases. Most of the medical care hospitals and clinics are privately owned and operated.

The "health care system" is the public sector of community health centers which are managed by the central and local government agencies. The percentage of public hospitals and clinics is small as compared with the private sector. National and local governments have assumed responsibility only for health care services in the community.

After Japan abolished its isolation policy in the middle of the nineteenth century, personal contact and trade between Japan and foreign countries rapidly increased. One of the early problems which focused on public health was to control acute communicable diseases such as variola and cholera. Regulations to control these diseases were implemented by the authorities.

The rapid industrialization changed the living conditions of the people. The laboring classes worked in factories under poor working conditions and lived in urban areas where sanitary conditions were also poor. In addition to acute communicable diseases, new public health problems appeared. Bad living and sanitary conditions caused a high rate of infant mortality, nearly 160 per 1,000 live births between 1910-1920 (4). Tuberculosis was widespread among the young, especially in young females working in the spinning and textile industry, in which tuberculosis was common even in rural areas (5).

The matter of maternal and child health and control of tuberculosis were new health problems with which the nation was faced. To solve these problems, various kinds of health consultation facilities were planned and built, at first, mainly by voluntary agencies and contributions. By 1927, about 200 facilities for maternal and child health care were serving in the community, according to research by the Central Sanitary Bureau of the Department of Home Affairs (6).

A special committee of the Board of investigation for health and sanitation submitted recommendations about how to decrease the high infant mortality rate. They proposed to follow the European model of a child health center which comprised a team of at least one physician, a public health nurse and a nurse for an area of 12,000-15,000 residents.

The health consultation facilities for tuberculosis control were built with the financial aid of the National Radio Broadcasting Company (NHK).

Health consultation facilities for persons affiliated with the post office and other health insurance plans were built by the appropriate responsible agencies

beginning in 1922. With the support of the Rockefeller Foundation, an urban and a rural health center were built in Tokyo and in Saitama prefecture respectively in 1935 and 1938. The Institute of Public Health was also established with the aid of the Rockefeller Foundation in 1938.

For the purpose of promoting the physical health of the people, the original Health Center Law was enacted in 1937. But the main purpose of establishing the centers might be thought to improve the health of Japan's man power for the war. The Ten-year program for health center construction started during the Second World War. The total number of health centers reached 770 in 1944 through consolidation and organization of health consultation facilities already built. The health centers were mainly responsible for tuberculosis control, the maternal and child health program and health promotion for males prior to military service.

After the Second World War, the Health Center Law was completely revised to reorganize the public health program (6). Forty-seven prefectures (states), 30 larger municipalities specially designated by the law and 23 wards of the city of Tokyo now have their own health centers. About 850 health centers are active and function as the community health service agency and the health administrative agency.

The basic functions of the health center defined by the Health Center Law includes: 1) health education, 2) vital and health statistics, 3) improvement of nutrition and food sanitation, 4) environmental health, 5) public health nursing, 6) medical social service, 7) maternal and child health, health care for the aged, 8) dental health, 9) laboratory service, 10) mental health, 11) prevention and control of tuberculosis, venereal diseases and other communicable diseases, 12) other local health programs as required such as specific endemic disease control.

The Health Center Law stipulates the standard population served by a health center to be about 100,000 persons. However, because of the shift of population occurring with urbanization, the actual population served ranges from 10,000 to 600,000 persons. The regulations also require that the director of a health center must be a medical doctor who has some practical experience in the field of public health or has been trained at the Institute of Public Health (7, 8).

#### *Reorganization of Health Centers*

After the Second World War, the health administrative organization of the national and the local governments was reorganized according to orders from the military occupation authority (GHQ).

As for health centers, the Health Center Law was revised in 1947 and the role of health centers was enlarged. In 1949, one model health center classified as A-class was designated for each prefecture and all other health centers were

classified A, B, or C-class, according to the size of the facility and the number of personnel working in it.

A number of laws relating to public health and welfare, such as the Child Welfare Law, the Tuberculosis Control Law and laws on environmental health were newly enacted or revised. The health centers expanded their activities according to these laws.

As political and geographic consolidation of municipalities progressed, the size of population served by the health centers gradually became unequal. It was recognized that reorganization of the health centers according to the changing situation was necessary. In 1960, a new classification of health centers based on the area of the health center district, its population and extent of urbanization and industrialization was introduced, replacing the older A, B and C-class designation.

As living conditions improved and life style and living customs became more diverse, various kinds of health needs in the community have increased. It is apparent that it is necessary to discuss the health center's activities in order to meet these changes of health needs. The relationship between health centers and other medical and health agencies has been strengthened in order to carry out health care activities efficiently and effectively.

The Ministry of Health and Welfare has designated different roles and responsibilities for district health centers by introducing a new classification scheme to distinguish health centers, for example urban health centers (U-type), urban-rural health centers (UR-type), rural health centers (R-type), health centers with small population in a large geographic area (L-type) and health centers with small population in a small geographic area (S-type) (6, 9).

In Japan, economic conditions have rapidly improved since the late 1950s. Many new industrial areas have been built and industrialization has rapidly increased. Associated with industrialization, new public health problems have occurred. Public nuisances such as air and water pollution and noise have begun to have an unfavourable influence on the people in residential areas.

In spite of the reorganization of health centers in 1960, these problems have not always been handled effectively. Then, the Health Center Division of the Ministry of Health and Welfare devised a plan by which the administrative activities of health centers would become centralized in order to improve technical skills and efficiency. However, a number of health workers serving in health centers or municipal agencies have opposed the plan to organize the so-called "key health center", because if the plan would be carried out, a technological gap would occur among health centers and not a few health centers would be abolished (10, 11). As the opposition has been strong, the plan has been dormant for years.

In July 1972, the Committee on Health Center Problems of the Ministry of Health and Welfare finally submitted its keynote report (12). The features of the report may be briefly summarized as follows: 1) to relocate the health centers appropriately in light of up-to-date comprehensive community health activities, 2) present health centers might better be reorganized mostly as secondary and partly as tertiary facilities and 3) health information and health planning activities as well as environmental health activities should be strengthened at secondary and tertiary centers.

The keynote report has been criticized by not a few health workers. Important points of the criticism have been as follow; 1) If the responsibility for personal health services would be transferred from prefectural health centers to the local governments (city, town, and village), the latter may not be able to provide adequate health services because of limited finances and personnel. Many local governments are in financial difficulty. The major part of their financial resources is composed of national subsidies. More than five hundred local governments do not employ even one public health nurse for health services. 2) If health centers would control health information about individuals, the privacy could not be fully maintained (13).

In spite of this criticism, a research group for the effective utilization of health centers has been set up with a grant from the Ministry of Health and Welfare. This group submitted its report in May 1973. A separate committee for determining health and medical plans in the community was organized to study the distribution of medical care services in the fiscal year 1973. The committee's report helped strengthen the viewpoint of the necessity of a primary health center.

Recently the national government has been carrying out its plan to build a consultation facility whereby a local government could provide personal health services according to the plan recommended by the keynote report of the Health Center Problem. In this way, in 1978, the national budget establishing 100 municipality health centers (shi-cho-son health center) was brought into existence.

It is very important that various kinds of health consultation facilities including health centers would be discussed and investigated. Among these facilities, there are a maternal and child health center, a health promotion center and so on. Construction of a maternal and child health center was started in 1958. It was built by a local government supported by a national subsidy. The purpose of the facility was to prepare delivery rooms in rural and mountainous areas and to offer a place for maternal and child health services. In the beginning, its major role as a maternity home was important to its district. However, as maternal and child health practices have changed, its main role has



been changed to counselling mother and child about their health. At first, these facilities were built in rural and mountainous areas, but recently, they have also been built in urban areas. Now there are about 700 maternal and child health centers in Japan (4).

A health promotion center is a place where physical condition and ability of a person are checked and where the counselling about exercise or diet are given when necessary to promote the individual's health. In 1977, twelve centers were functioning (4).

A health station for public health nurse activities (a public health nurse station) is one of these facilities. To discuss the necessity of the station and evaluate its activities in a community is one of the purposes of this report and is described later.

#### *Distinctive Features of the Health Care System in Japan*

Recently, the need for comprehensive medical care has been recognized strongly by the public health and medical professionals. However, there are many problems with regard to the health (public) and the medical care (private) sectors, particularly in Japan (2).

Historically, the health and medical care systems developed differently from each other. Action to prevent diseases and promote health was viewed separately from therapeutic services. The responsibility of providing health care services largely belongs to governmental agencies rather than to medical care facilities whose primary role is therapy.

Health programs do not always meet the health needs of the people in a community because the budget for health affairs by the national and local governments has not always been sufficient, compared with the other fields.

Therapeutic medicine has been strongly emphasized but preventive medicine has been treated lightly during the education of the medical students. This is one of the causes of the shortage of public health doctors. Because of the shortage of specialists, especially public health doctors, health care activities have often neither been provided nor evaluated scientifically.

In the field of medical care, the role between hospitals and clinics has not clearly been distinguished. Hospitals have competed with clinics in providing medical care services. Medical doctors have been so powerful that professionals with paramedical training are not generally authorized.

#### FACILITIES FOR PUBLIC HEALTH NURSE ACTIVITIES

As mentioned above, one may distinguish a health care facility from a medical care facility. In Japan, the former, which is generally built and managed by a local government, has the responsibility of carrying out activities for preventing diseases without using curative or therapeutical measures, and

the latter is the facility where physicians treat or cure patients suffering from various kinds of diseases.

In order to effectively carry out health and medical care activities in a community, it is necessary to strengthen the close relation between health and medical care activities and to establish public health nurses as paramedical professionals. Furthermore, the facility for public health nurses' activities ought to be discussed as a way of coping with the increase in medical expenses of the nation and to meet health needs arising from recent trends in socio-demographic factors and disease incidence.

The function of each kind of practitioner is defined in the Public Health Nurse, Midwife and Nurse Law. A public health nurse is defined as a woman who is officially qualified as a public health nurse by the government and who engages in health consultation and guidance.

There are few studies documenting the facilities for public health nurses' activities though it would seem that well equipped facilities are essential for providing preventive and other health care services. In order to know what kind of facilities are necessary, the regulations of the National Health Insurance, which relate to both health and medical care services were reviewed.

#### *Requirement of a Public Health Nurse Station*

Public health nurses may practice health consultation and guidance. Most of them work in health care facilities such as health centers or in the field of school and industrial health. There are a few public health nurses who work in medical care facilities such as hospitals and clinics. They, usually being qualified nurses, have been given a license after one year of training for public health nurses and passing the national examination.

Recently, health workers have been gradually attaching great importance to primary care to effectively meet the changing needs in the field of medical care. To practice primary care, public health nurses should play an important role as primary contact medical or health worker.

In order to establish primary care systems, it is of great value to investigate the community health care activities of public health nurses and the facilities where they provide their services. In addition, it is also important to study how these resources must be, and can be used for effective and efficient health care activities in a community.

In order to propose what the facility for public health nurse activities should be, the following four factors which might influence the equipment of the facility were discussed (14): 1) function of public health nurses activities for community health care, 2) health and medical needs in the community, 3) relation to health and medical agencies and 4) ability of managing and using the facility.

*Function of public health nurses.* Public health nurses have to perform their activities as members of medical and health teams and they coordinate the health and medical care of the people in the community.

To carry out their activities they have to contact people in their homes and decide and treat appropriately various complaints related to daily life.

For that reason, the station must be a facility closely patterned after the daily life of the people in the district, and must be constructed where public health nurses may meet the medical and health needs of the people. Accordingly, the station should have rooms for consultation, a living room, a kitchen and a bathroom for use as models of practical health education.

*Medical and health needs in the community.* In spite of the gradual increase in chronic diseases such as stroke, cardiovascular disease and cancer, there are few facilities which typically treat patients suffering from these diseases.

Public health nurses have visited patients at home and given information concerning their daily life. Recently these cases have been increasing and the information given by the public health nurse has changed qualitatively. Practical information about chronic diseases is a matter of great importance and many articles have shown the usefulness of patient education.

In order for a medical and health team to understand the health needs in the community, data from public health nurses activities are essential. There must be a facility where public health nurses gather and tabulate the information about the people in the community.

For both well-baby clinic and other health examinations, health workers, especially public health nurses, must consistently check the development of the child. For this purpose, there must be a facility to meet multiple medical and health needs. "The station" should be a facility to serve several functions.

*Relation to health and medical agencies.* There are many facilities for health care activities such as maternal and child health centers, health consultation rooms, centers for health administration and so on. These facilities are used and administrated effectively and efficiently only when they are used for public health nurses activities.

In this way, the station must not compete with the medical or health care facilities already in use, but should supplement them.

*Ability of managing and using the station.* The station must be administrated by at least two public health nurses but this does not mean that other health workers cannot use and manage the station. From the standpoint of the people in the community, the station must be built in a place which is convenient for transportation. The area that the station serves should be decided by the size of the population and the number of public health nurses who work at the station.

Consequently, the following equipment is necessary in building the station.

TABLE 1. NUMBER OF LOCAL GOVERNMENTS (LG) PARTICIPATING IN THE NHI WHICH EMPLOY A PHN AND HAVE SET UP A FACILITY FOR PUBLIC HEALTH NURSE ACTIVITY AND NUMBER OF THE FACILITIES

Prefecture	No. of LG (A)	LG employing a PHN		LG setting up a facility		No. of the facilities Station of locality			
		No. (B)	Rate <sup>a</sup>	No. (C)	Rate <sup>b</sup>	In the LG office	At district	Combined to medical agency of the NHI	
1. Hokkaido	213	167	78.4	91	54.5	63	110 (50) <sup>c</sup>	7 (7) <sup>c</sup>	
2. Aomori	67	39	58.2	24	61.5	16	35 (12)	0 (0)	
3. Iwate	63	63	100.0	41	65.1	23	97 (26)	12 (10)	
4. Miyagi	74	72	97.3	34	47.2	26	36 (13)	4 (4)	
5. Akita	69	63	91.3	30	47.6	25	61 (18)	3 (3)	
6. Yamagata	44	44	100.0	18	40.9	11	47 (12)	4 (3)	
7. Fukushima	90	82	91.1	59	72.0	50	67 (17)	12 (8)	
8. Ibaragi	92	72	78.3	12	16.7	8	11 (5)	1 (1)	
9. Tochigi	49	46	93.9	17	37.0	8	21 (12)	2 (1)	
10. Gunma	70	70	100.0	40	57.1	31	45 (12)	4 (4)	
11. Saitama	93	74	79.6	62	83.8	32	99 (48)	5 (5)	
12. Chiba	81	57	70.4	21	36.8	12	10 (9)	1 (1)	
13. Tokyo	41	27	65.9	11	40.7	6	3 (3)	2 (2)	
14. Kanagawa	37	14	37.8	5	35.7	5	0 (0)	0 (0)	
15. Niigata	112	107	95.5	30	28.0	21	30 (9)	6 (3)	
16. Toyama	35	35	100.0	17	48.6	12	25 (9)	3 (3)	
17. Ishikawa	41	27	65.9	9	33.3	5	17 (8)	1 (1)	
18. Fukui	35	25	71.4	16	64.0	132	(2)	3 (3)	
19. Yamanashi	64	54	84.4	34	63.0	29	43 (13)	5 (4)	
20. Nagano	124	109	87.9	88	80.7	74	131 (33)	16 (13)	
21. Gifu	100	47	47.0	29	61.7	12	26 (11)	9 (9)	
22. Shizuoka	76	65	85.5	41	63.1	24	65 (25)	0 (0)	
23. Aichi	80	28	35.0	10	35.7	10	16 (3)	0 (0)	
24. Mie	70	30	42.9	16	53.3	16	21 (8)	2 (2)	
25. Shiga	50	42	84.0	9	21.4	2	6 (4)	4 (3)	
26. Kyoto	44	43	97.7	17	39.5	15	27 (7)	3 (3)	
27. Osaka	45	13	28.9	6	46.2	3	26 (6)	1 (1)	
28. Hyogo	94	52	55.3	22	42.3	17	8 (3)	10 (6)	
29. Nara	47	13	27.7	11	84.6	5	7 (6)	6 (4)	
30. Wakayama	50	24	48.0	24	100.0	18	61 (17)	5 (5)	
31. Tottori	39	38	97.4	7	18.4	3	5 (4)	2 (2)	
32. Shimane	59	51	86.4	21	41.2	18	37 (12)	1 (1)	
33. Okayama	82	68	82.9	33	48.5	23	51 (13)	11 (8)	
34. Hiroshima	104	70	67.3	39	55.7	25	103 (26)	5 (3)	
35. Yamaguchi	56	46	82.1	19	41.3	14	38 (10)	2 (2)	
36. Tokushima	50	37	74.0	26	70.3	16	28 (11)	3 (3)	
37. Kagawa	43	42	97.7	30	71.4	24	43 (12)	5 (4)	
38. Ehime	71	59	83.1	27	45.8	24	38 (14)	4 (2)	
39. Kochi	53	9	17.0	7	77.8	7	9 (3)	0 (0)	
40. Fukuoka	98	58	59.2	17	29.3	13	13 (6)	0 (0)	
41. Saga	49	39	79.6	15	38.5	13	8 (3)	0 (0)	
42. Nagasaki	80	55	68.8	25	45.5	19	14 (9)	1 (1)	
43. Kumamoto	98	65	66.3	18	27.7	10	21 (6)	1 (1)	
44. Oita	58	43	74.1	25	58.1	23	36 (11)	0 (0)	
45. Miyazaki	44	38	86.4	13	34.2	10	10 (6)	0 (0)	
46. Kagoshima	96	54	56.3	23	42.6	19	23 (6)	2 (2)	
Total	3,230	2,376	75.6	1,189	50.0	853	1,630	553	168 138

<sup>a</sup> B/A × 100, <sup>b</sup> C/B × 100, <sup>c</sup> Number in parentheses indicates the number of local government.

a) consultation room, b) large room for multipurpose use such as promoting daily activity, health education, mass examination and vaccination, c) room for administration and patient records, d) living room, e) kitchen, f) bath room, g) miscellaneous rooms for storage, patient waiting room and so on.

*Distribution of the Facilities Which Have Been Set up for Health Care by Local Authorities*

In order to know how public health nurses use existing health care facilities, the distribution and utilization of facilities previously built by local authorities were surveyed. The National Health Insurance Divisions of each prefecture were questioned about the most effective facility for public health nurse activities available in the national health insurance. Responses were received referable to 213 facilities. The data were analyzed as follows :

Table 1 shows the numbers of local governments (city, town, village) by prefecture, participating in the National Health Insurance Systems which employ a public health nurse and have set up a facility for health consultation. The officers of the local governments were questioned about how these effective facilities were utilized.

Fig. 1 shows the fact that there are many users living more than 6 km from the facility. However, a health care facility need not always remain open in order to provide care to the community members. Fig. 2 shows that an effective facility may be closed two or three times per week to permit public health nurses to carry out their field activities away from the facility.

As shown in Fig. 3, when a facility is open more often for public health nurse activities inside the facility, it is used by the people who live rather near

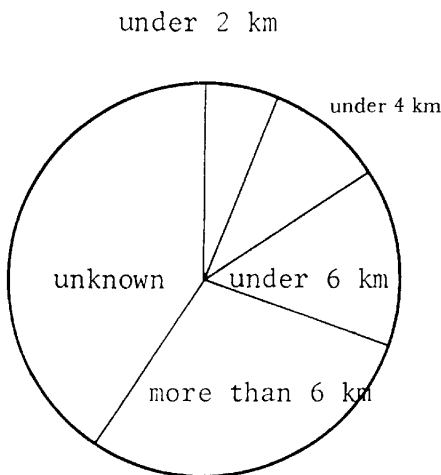


Fig. 1. Distance from a facility (for users)

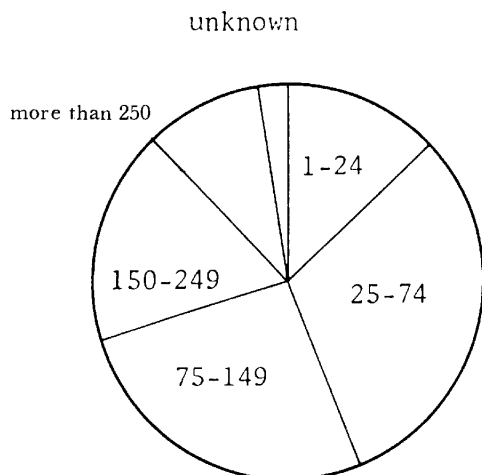


Fig. 2. Activities in a facility (days per year)

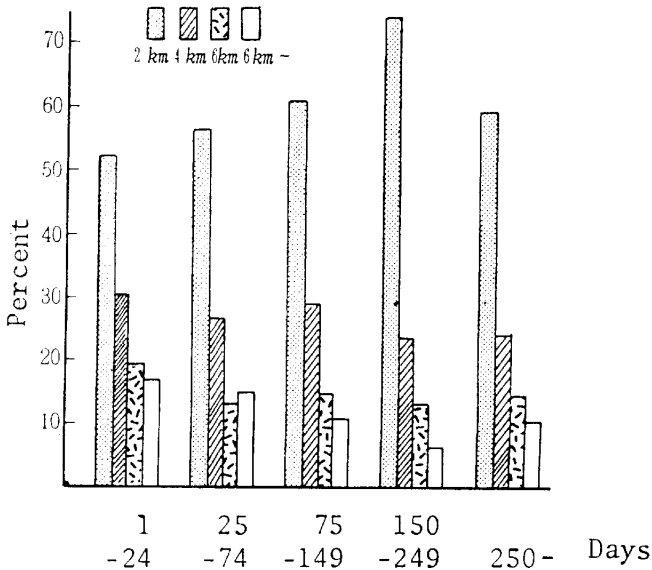


Fig. 3. Relationship between the distance and the use of a facility by accessibility in kilometers

from the facility. The uses of the facility are shown in Table 2. This indicates that a facility is used for vaccination, consultation about maternal and child health, consultation about chronic diseases and so on. Many facilities are staffed by more than two public health nurses and have more than two rooms, as shown in Figs. 4 and 5.

TABLE 2. PURPOSE OF USING A FACILITY

Purpose	Number	Percent
Consultation for adult health	44	21.2
Consultation for maternal and child health	64	30.8
Consultation for the others	7	3.4
Disease prevention	9	4.3
Guidance for rehabilitation of the adult diseases	3	1.4
Guidance for maternal and child health	4	1.9
Guidance for daily life	3	1.4
Vaccination	71	34.1
General health consultation	1	0.5
Unknown	2	1.0
Total	208	100.0

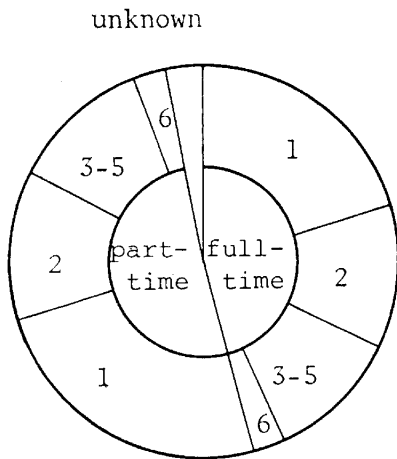


Fig. 4. Number of public health nurses who manage a facility

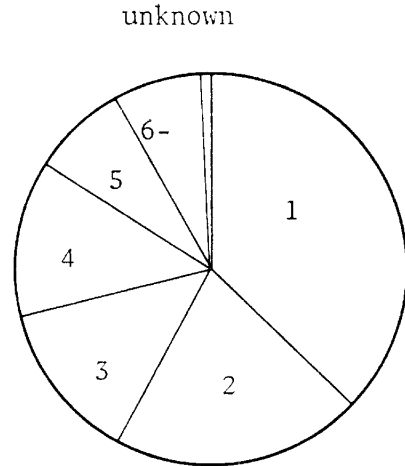


Fig. 5. Number of rooms per facility

*Present Status of Public Health Nurse Stations*

According to our proposal for the station, the national government decided in 1974 to subsidize local governments for construction of any stations. A questionnaire was sent to the local governments which had built stations with the aid of national or prefectural subsidies. The results are tabulated for 9 stations. However, since few data are available due to the newness of several stations, much of the following refers to responses received from the station at Nyuzencho, Toyama Prefecture, which was the first station to be activated.

*Some public health nurse stations.* As shown in Table 3, nine stations belong-

TABLE 3. STATUS OF THE EXISTING 9 STATIONS

Station name (city, town, village)	Population	Percent of persons covered by the NHI	Floor space (m <sup>2</sup> )	No. of PHN	Open (days per week)
1. N.	28,884	36	195	6	3
2. Ib.	30,600	73	160	6	3-5
3. G.	23,000	60	194	3	5
4. A.	14,634	70	133	4	2
5. S.	10,629	45	160	3	3
6. Iz.	37,846	49	182	4	1
7. Os.	11,272	47	274	3	1
8. U.	13,851	48	295	3	2-3
9. Og.	5,760	73	152	3	2

NHI : National Health Insurance, PHN : Public health nurse.

ing to the National Health Insurance Organization have already been initiated in Japan. Two of the nine stations were not financed by the national government. National subsidies to the other seven stations ranged from two million to three million yen (U.S. \$ 10,000–15,000). Prefectural subsidies were either equal to or half of the national subsidies. If national and prefectural subsidies are insufficient to permit construction, a station may be financed from funds of the Employees Pension Plan.

The floor space of a station was about 200 square meters. This was more than the minimum standard that the national government had established.

The stations are open from one to five days a week. The stations are often utilized for health consultation about degenerative diseases. Furthermore, the stations were utilized for health examinations and vaccinations if they were built near a public hall or a medical clinic.

*Evaluation of the station.* The first station was built in Nyuzen-cho, Toyama Prefecture, in 1974. There has not been sufficient passage of time to permit adequate evaluation of the stations activities in terms of disease morbidity or mortality. However, it appears that the presence of a station does have considerable effect on the method of providing medical care in the community (16, 17).

*Public health nurse activities.* Physical plans of a station provide for public health nurses to have a room for consultation, so the activities for counselling are improved. But, if a station was built following the advice of non health officials of a local or prefectural government, who did not always fully understand the duties and responsibilities of public health nurses, the nurse's activities were not always carried out effectively.

*Demand for health and medical care by the people.* Recently, people have demanded that the health and medical agencies listen to and promptly comply with their complaints. Because the issues involved in these complaints are complicated and multifaceted, the public health nurses must have an awareness of and the ability to deal with the demands of the people.

*Attitude of an administrative agency.* Management of the station is different depending upon whether the station has been built in response to the people's demands or an administrative decision of a governmental official.

*Relation to a medical organization.* A basic problem is that "health care" and "medical care" has never been defined. The station relates well to physicians but there is a problem about their relationship with the medical associations. Without the support and understanding of the Medical Association, physicians who are its members, can not work together effectively with the stations. The stations' activities should be supported especially by medical doctors of a health center.

*Health and medical care services.* When the station was built, the demand for



health services actually increased, both quantitatively and qualitatively.

*Expenditures for medical care and causes of deaths.* At Nyuzen-cho where the first station was built in 1974, the increase of expenditures for medical care provided by the National Health Insurance Plan decreased compared with that of other insurers in the same prefecture during 1974 and 1975 (Table 4), although it was higher in 1973.

TABLE 4. INCREASING RATE OF EXPENDITURE FOR MEDICAL CARE BY THE NHI\*

District	Rate (%)		
	1973	1974	1975
Nyuzen-cho	22.4	8.0	5.4
Toyama Prefecture	18.6	18.4	13.2

\* excludes the increase in expenditure caused by the revision of medical cost

According to the activities of the station, the causes of deaths changed as shown in Table 5. The numbers of deaths from cerebrovascular diseases decreased from 82 in 1972 to 60 in 1975.

TABLE 5. NUMBER OF DEATHS, SELECTED CAUSES 1972 AND 1975

Cause of death	1972		1975	
	No.	Percent	No.	Percent
Cerebrovascular diseases	82	32.6	60	25.9
Malignant neoplasms	46	18.2	30	12.9
Heart diseases	31	12.4	54	23.3
Senility	12	4.8	20	8.6
Accidents	27	10.8	17	7.3
Suicide	4	1.6	12	5.2
Diseases of the kidney	6	2.4	6	2.6
Diabetes mellitus	—	—	2	0.9
Diseases of the respiratory system	14	5.6	14	6.0
Diseases of the digestive organs	6	2.4	5	2.2
Tuberculosis	3	1.2	4	1.7
Others	20	8.0	8	3.4
Total	251	100.0	232	100.0

Prior to construction of the station, some health workers feared that the public health nurses activities would be hampered by their duties inside the station. However, it appears that duties both outside and inside the facility were carried out effectively.

PROSPECTS OF THE FACILITIES FOR HEALTH CARE ACTIVITIES

Though health centers have had many problems in carrying out their duties, favorable results have been achieved from their health care activities in the community. It is a common opinion that individuals have the responsibility to protect themselves from various health hazards. Most of the Japanese people generally hold this opinion but we also believe that most diseases are caused by bad working conditions, bad sanitary conditions and environmental factors such as public nuisances. Therefore, the responsibility for maintaining good health becomes rather the duty of industry and government administrative agencies. In order to carry out medical and health care activities effectively, it is necessary for the people to change their opinion and begin making demands for health and medical care appropriate for the problems which they face.

As the demands of the people influence health care activities, the health care facilities must provide services according to the needs of the people in the community. Personal health services of the health centers should be strengthened more and more. Furthermore, the numbers of health professionals, not only medical doctors, but also other health workers especially public health nurses who are often the primary contact for patients, must be increased.

The health care facilities (health centers) should promote comprehensive care. In order to carry out the activities to meet the demands of the people particularly in rural and mountainous areas, it is not practical to separate medical from health needs. It is necessary to solve the discrepancy between health care services and medical care services. There is a good model in the public hospital in Sukumo, Kochi Prefecture, which started comprehensive health care activities and which has had good results (2, 10, 18). The demands of the people in the region have been changing, for example, from the "medical demands" to get a specialist such as neurosurgeon to the "health needs" for sanitary and working conditions relating to daily life.

However, this is one measure to solve the problems, there is another solution. Health centers should have responsibility and provide medical care services particularly in rural areas where physician and medical care facilities are inadequate. Health centers with facilities built by local governments including public health nurse stations should be changed in this direction and should play an important role in programs for medical and health care.

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