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日本における老人医療の問題点とその対策

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APPROACHES TO HEALTH CARE OF THE ELDERLY PEOPLE IN JAPAN

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Until the end of World War II in 1945, Japan was considered to be one of the most civilized nations in the Orient, as there were strong interests and concerns toward public health among private and public sectors alike. The reality, however, was somewhat different. Tuberculosis and other acute infectious diseases ranked high among the causes of deaths, and infant mortality rate was also considerably high. The average life expectancy, therefore, was less than 50 years in 1935 (46.92 for males and 49.6 for females).

After World War II there were some fortunate situations in the development of health in Japan such as financial as well as health administrative assistance from the U.S. and a dramatic advancement in the chemotherapy of infectious diseases. In addition birth control guidance, improvement of environmental hygiene, mass-examination for T.B. control, increased opportunities for regular health check-ups through which early detection of adult chronic diseases such as hypertension, malignancy, cardiac diseases and diabetes became possible. Also through increased health education and public awareness for prevention of chronic diseases, the life span of the Japanese began to extend steadily after a decade from the end of W.W.II. This upward trend continued over the years and in 1987 the average life expectancy at birth of the Japanese reached 75.61 years for males (72.0 for the white male population in the U.S.) and 81.39 years for females (78.9 for white females in the U.S.). In terms of longevity of the population, Japan ranked top in the world. The consequence of this achievement, however, was a rapidly aging population structure.

Today Japan faces a growing problem of medical and welfare care for the elderly, but the administrative measures to cope with the problems arising from the emergence of elderly population are lagging behind. Thus elderly people in Japan today are being confronted with various difficulties in their health and life in general. In the following paragraphs I would like to discuss some of these problems more in detail.

Aging of Japanese Population—Present and Future

Fig. (1) shows the changes of the average life span (life expectancy by birth) of the Japanese over the years. It shows that in 1935 the life expectancy by birth of the Japanese was 46.92 years for males and 49.6 years for females. But two years after the end of W.W.II, it had already exceeded 50 for

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Fig. 1

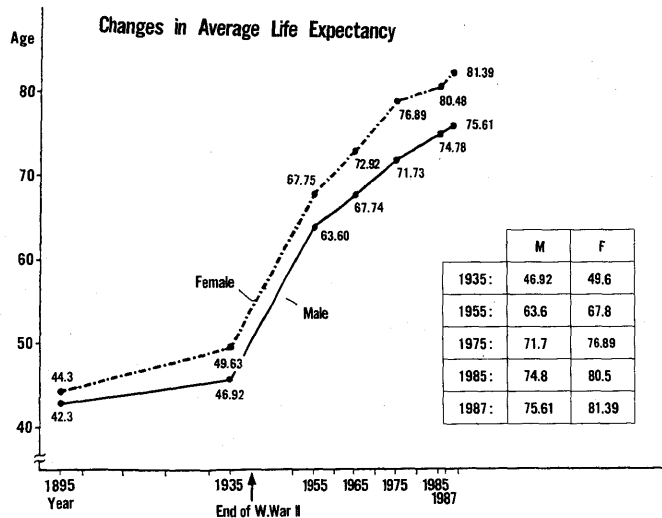


Fig. 2 International Comparison of Average Life Expectancy

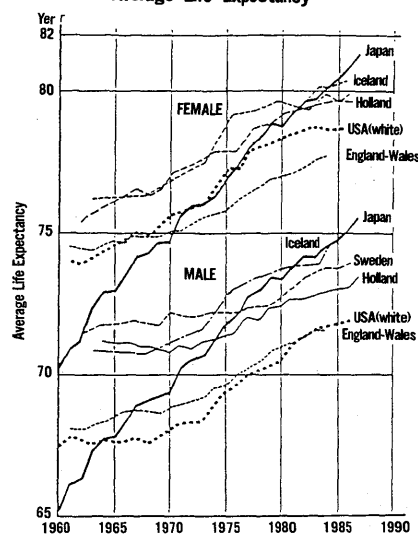
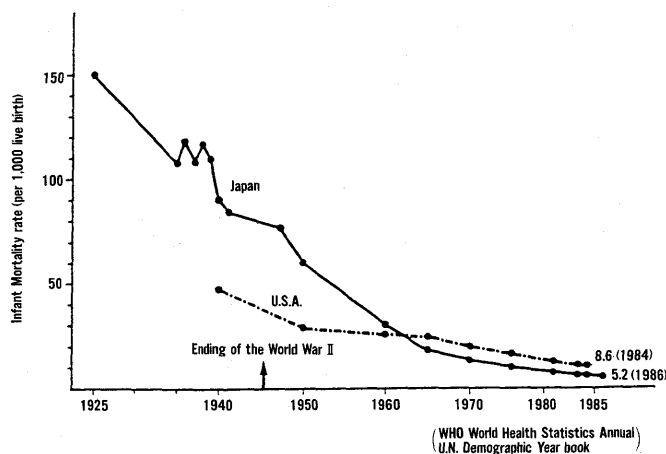


Fig. 3 Comparison of Yearly Infant Mortality Rate of Japan and USA



both males and females, and in 1955, ten years after the war, the male and female average life expectancy exceeded 65 i.e., 63.6 for males and 67.75 for females. Thirty years after W.W.II in 1975 it reached 71.73 for males and 76.89 for females. In 1985, forty years after the war, it reached 74.78 for males and 80.48 for females, both clearly exceeding those of the U.S. average. In 1987 it marked 75.61 years for males and 81.39 years for females. As shown in Fig. (2) these figures marked the world record exceeding those of other nations known for longevity such as Iceland, Sweden and the Netherlands.

Some of the reasons behind this notable longevity of the Japanese are (1) drastic decrease of deaths from tuberculosis and other infectious diseases and (2) marked decline of the infant mortality rate.

This high infant mortality rate in the past was partly due to prolific nature of childbirth pattern of the Japanese females in those days and also to fairly common infant deaths by infectious diseases and malnutrition. As we look back the mortality rate of infants less than 12 months old, it was very high around 1925 with more than 150 deaths per 1,000 live births. In 1940 it was reduced to 90/1,000. The decline was very rapid after W.W.II and in 1960 it dropped to 30.7/1,000 and it came down as low as 5.2/1,000 in 1985. Such a rapid decline is unheard of in the world and today Japan ranks among the nations with the lowest infant mortality rates (Fig. 3).

The mortality rate of the population was 14.6 in 1947, two years after W.W.II but became 6.2 in 1986 (8.6 in the U.S. in 1984). This notable decline in the mortality rate, together with the rapid decline of the infant mortality rate mentioned above, reflects improvement in general health conditions in Japan, and at the same time gave Japanese an extraordinarily long life expectancy.

Changes in the Causes of Deaths of the Japanese

As shown in Fig. (4) tuberculosis, pneumonia and other infectious diseases were the top causes of death of the Japanese until around 1950, but by 1955 this gradually gave way to other diseases. On the other hand CVA deaths increased rapidly and in 1951 it became the top cause of deaths while malignant tumor ranked second and the third was cardiac diseases. In 1981 malignant tumor ranked top followed by CVA and cardiac diseases. Since 1985 deaths by malignancy steadily increased and cardiac diseases ranked second while CVA became the third.

What are the reasons behind the rapid decrease of CVA deaths in 1970's, which had long been the top cause of deaths in Japan? First, the dietary habits of the Japanese which had allowed high NaCl intake (average 15g per day) have changed and salt intake gradually decreased to 12g per day through extensive health education. Secondly, regular health examinations focusing on the blood pressure check-up, which became widely available to general public since 1955, enabled early detection and

Fig. 4

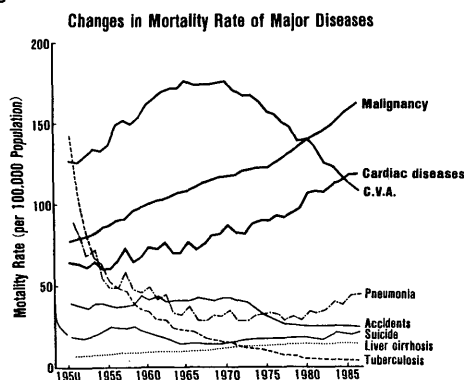
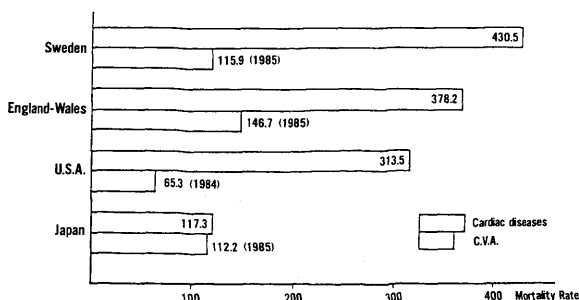


Fig. 5

Comparison of Mortality Rates of Cardio-Cerebro-Vascular Diseases Among 4 Countries
(Per 100,000 population)



treatment of hypertension, thus reducing CVA deaths. More recently, in addition to the decrease of the infant mortality rate, decrease of cerebral bleeding deaths, due to hypertension, among the middle age population contributed considerably toward extension of average life expectancy of the Japanese.

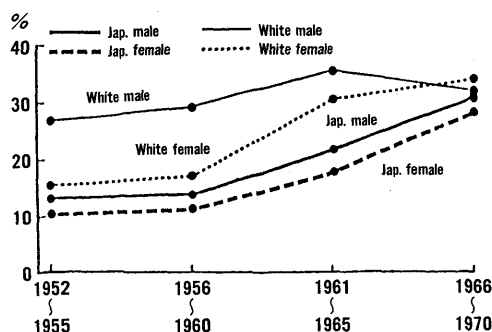
Fig. (5) shows the top two causes of deaths of the Japanese in 1985. Its comparison with that of Europe and the U.S. can be seen in Fig. (5). Cardiac diseases are the second largest cause of deaths in Japan but compared to the large figures in Europe and the U.S. it is still fairly small. In fact, it is only one third of that of the U.S. (313.5 deaths per 100,000 in the U.S. in 1984). On the other hand CVA deaths occur twice as frequently in Japan as in the U.S. even though there has been some notable decrease in the recent years. This may be largely attributed to the difference in dietary habits and NaCl intake between the U.S. and Japan.

As for cancers, stomach cancer ranks highest followed by lung cancer, but a GI X-ray test and gastro-endoscopy screening have become easily accessible to the general public, more and more early cases are discovered and consequently successful surgery can be performed. Apart from this, decrease of NaCl intake from food and westernization of dietary habits are assumed to be contributing factors toward gradual decrease of stomach cancer cases. Contrary to this, colon cancer cases are steadily increasing over the years.

In a study on mortality by cardiac disease carried out in Hawaii and Japan over a long period of time (Fig. 6) it was found that among the Japanese living in Hawaii deaths by cardiac disease are on the increase while CVA deaths are decreasing over the past 20 years. The patterns of deaths by cardiac disease and CVA are almost identical among the resident Japanese in Hawaii and white Americans. This similarity is attributed to the changes in the life style of the Japanese, particularly dietary habits, from Japanese food to American food. Through the westernization of diet, particularly apparent among the younger generations of Japanese, the amount of animal fat and sugar intake is approaching the level of American people and cases of obesity are increasing. If this trend continues, we will have to anticipate more deaths by cardiac diseases. It is our concern that in 20 or 30 years' time, when the present young generation reaches middle age, they may no longer be able to enjoy longevity in the 21st century.

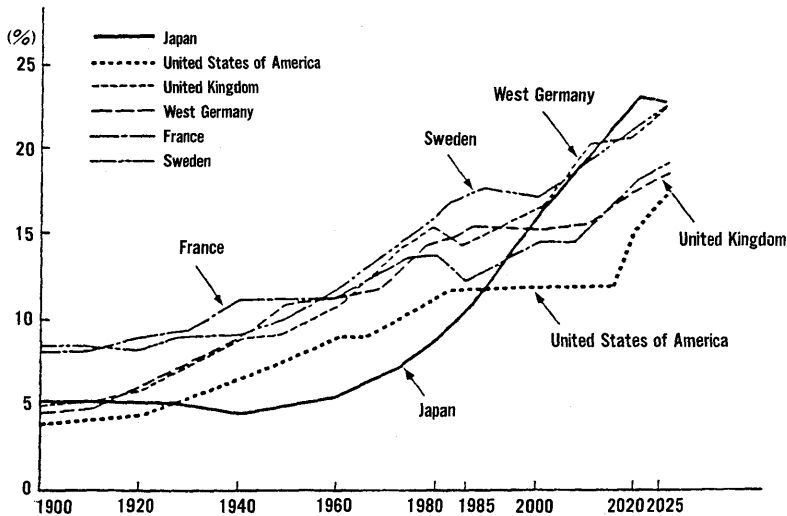
Fig. 6

Changes of Death Rates Due to Ischemic Heart Disease Among the White and the Japanese in HAWAII
(Univ. of Hawaii and Univ. of Hiroshima Study)



The Ministry of Health and Welfare of Japan and private sectors as well are now making an effort to implement various countermeasures to prevent chronic degenerative diseases of adults. The Ministry encourages people to change their life styles so as to successfully prevent these diseases. It also urges people to have regular health check-ups to enable early detection of these diseases. If people correctly interpret these messages and follow the instructions and unless the dietary habits of the younger

Fig. 7 Trend of Ratio of the Aged (65 years and over) to the Total Population

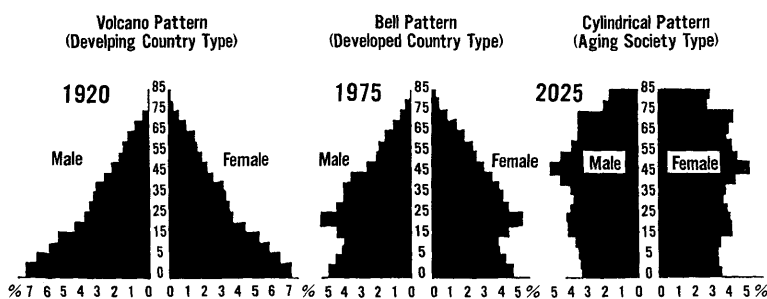


Source: For Japan, from Statistics Bureau, Prime Minister's Office and Institute of Population Problems, Ministry of Health and Welfare for other countries, from UN

Table 1 International Comparison
— Progress of Population Aging —

	The year when the elderly population (65 or over) reached 7% & 14% of total population		No. of years required for this increase
	7%	14%	
Japan	1970	1996	26
U.S.A.	1945	2020	75
England	1930	1975	45
W-Germany	1930	1975	45
France	1865	1980	115
Sweden	1890	1975	85

Fig. 8 Changes in Population Structure



of 14% in 1996, after only 26 years (Table 1).

Fig. (8) shows the changes in the types of population structure in Japan in the past, present and

generation are kept from shifting more toward the western pattern it is not unrealistic to expect still further extension of life span. But we must remember that it will at the same time create a more aging population structure.

The proportion of the elderly people, 65 or over, in the total population of Japan reached 10.3% in 1985 and the problem of aging population became a prime concern of the country. In 1987 the figure increased to 10.9% and it is expected to reach 16.3% in 2000 and 23.6% in 2020. Population aging began late in Japan compared to other European nations. However as Fig. (7) shows the curve of increase is very steep and it is expected that before long Japan will be among the nations with large elderly population. It was 1945 when the elderly population of the U.S. reached 7% of the national population, but it is estimated that it will take the U.S. nearly 75 years to double the rate to 14% in 2020. Japan also reached this 7% in 1970 but is expected to reach the level

future. The 1920 census showed that the population structure was a 'volcano shape', which is common among the developing nations. In 1975 census, fifty years later, it became a 'bell shape', which is often found among the developed nations. In 2025, 36 years from now, it is expected that the population structure will be a 'cylinder shape', typical of aging society.

The rapid increase of aging population such as this will reduce the working population in future unless the elderly people remain working for some time even after their normal retirement age of 60. At the same time the aging of the population will create social and economic problems as increasing financial burden of medical expenses and pension funds have to be shouldered by the working population. In the following paragraphs I will discuss the medical expenses of the elderly people.

The Elderly People and Medical Care in Japan (Rates of Receiving Medical Care)

Every three years Ministry of Health and Welfare conducts a nationwide survey to see how many people receive medical or dental treatment on a certain day of the year throughout Japan. According to the survey conducted on October 1st, 1984, altogether 7.7 million people were receiving treatment and among them people over the age of 65 accounted for 27.6%. This is nearly three times more than the ratio of those between 15-19 years of age. The types of sickness for which people received medical treatment are shown in Fig.(10) in different age groups. Cardio-vascular diseases increase at the age of 45 or over and this trend accelerates with the advancement of age.

Fig. 9

Trends in the Rates for Receiving Medical Care for Different Age Groups

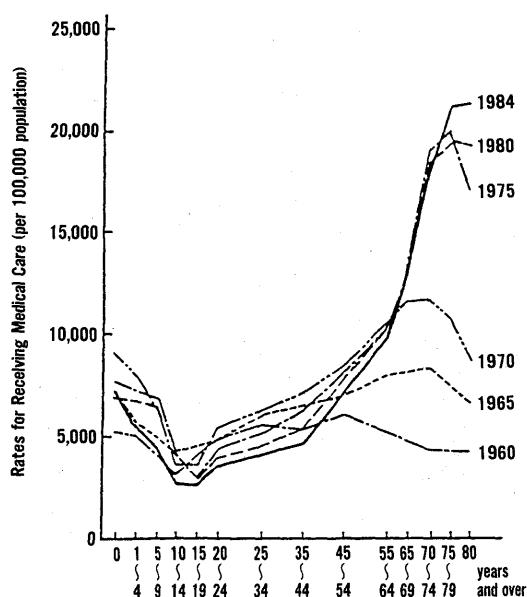
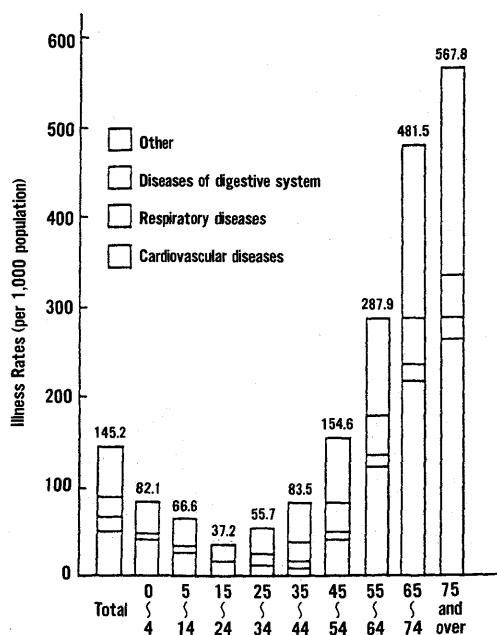


Fig. 10

Illness Rates for Different Age Groups and Types of Illness :



National Health-Survey (1985). Statistics & Information Department. MHW

A survey conducted in 1970 shows that among the age group of 70 or over there are 11,000 people out of 100,000 (10,797/100,000) who received some kind of medical care in 1970 (Fig. (9)). In 1984 the ratio increased to nearly 20,000 out of 100,000 (19,936/100,000). The figure doubled during the 14 years. It is obvious that the growth of elderly population is pushing up rates of those receiving medical care.

The disease that the elderly people of 70 or above are most susceptible to is cerebrovascular diseases (one in five are suffering from this) followed by diseases of the digestive system and respiratory disease (Fig. 10). Among the patients of cerebrovascular diseases, a fairly large amount of medical cost of hypertension patients has a significant effect toward rapid increase of medical expenditure for the elderly people.

In order to study the sickness rate and aging we divide the elderly population into two groups (A) for 65-74 (early old age) and (B) for 75 and over (late old age). As Table 2 (1986-87 statistics) shows in group (A) 615.6 people out of 1,000 were sick and in need of medical care while in group (B) it was 691.9 out of 1,000. The sickness rate of 75 years or over was as high as 70%. One of the characteristics

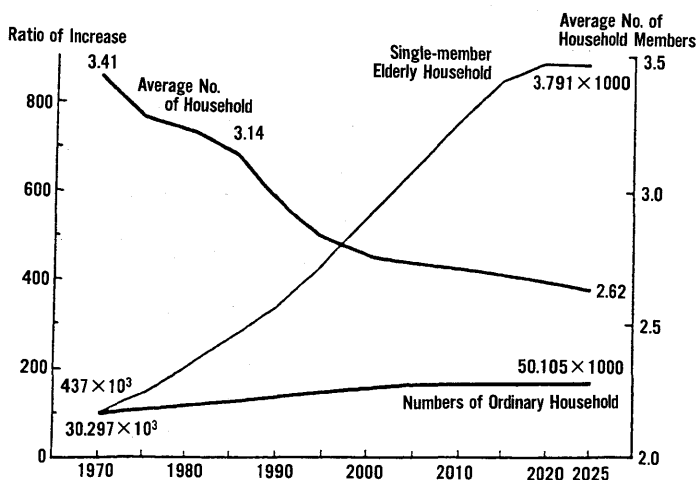
Table 2

General Conditions of the Elderly People in Japan

	Employed	Illness Rate	Bedridden	Incidence Rate of Dementia	Living with own child (children)
(A) Early Old Age (65-74)	33.2%	1,000 pop 615.6	1,000 pop 6.9	1.9%	59.0%
(B) Late Old Age (75-)	11.7	691.9	35.1	9.5	73.0

Fig. 11

"Striking Increase of Single-member Elderly Household" Estimated Increase of Elderly Households

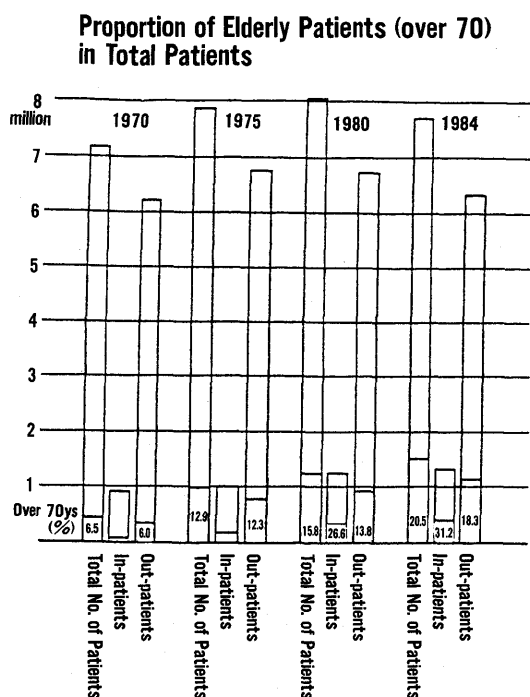


N.B. No. of household: Based on the index year of 1945 as 100.
Figures in parenthesis is per unit of 1,000

of the elderly people in Japan is that the number of bedridden people is greater than in the U.S. It is attributed to Japanese way of living, a life on tatami mat floor. The number of bedridden people in group A was 6.9/1,000 while in group B it became 35.1/1,000. 3.5% of those over 75 are bedridden. Unlike westerners who climb out of bed and sit on the chair, the Japanese sleep on mattresses on tatami mat, dine on tatami mat and, and sleep again on the mattresses on tatami mat. A living style such as this causes atrophy of bone-muscular system and obstruct free movement of limbs and body, thus resulting in disuse syndrome and further difficulties in limb movement.

A survey on living patterns, in terms of their relationship with their children, of the above two groups shows that 59% of the people in group (A) live with their own child(children) while in group (B) 73% live with their child(children).

Fig. 12



In urban circumstances, however, more elderly people are living on their own as in the U.S., but the more the aging advances the more want to live with their own children. Answers to a questionnaire on this topic show that the majority of people, whether parents or children, replied that they want to live with their own child (children) when they get old.

In Japan the average size of family continues to become smaller and nuclear families are becoming common. It is estimated that toward the year 2025 the average number of family members will continue to decrease to 2.62 and accordingly single-member elderly household will increase. If we take 1970 as an index year of 100, the number of single-member elderly household in the year 2000 will be 500 (5 times that of 1970) and in 2025 it will be more than 800 (8 times more). (Fig. 11) This means that there will be much greater need for hospitals and nursing homes

where the elderly people can receive the cares they need. It will also mean more need for nurses to care for the elderly. Currently the ratio of nurses per bed in Japan is only one third of that in the U.S.

As we look at the ratio of the elderly (70 years or over) in the total number of patients (in-patients and out-patients), it accounted for 6.5% in 1970 but during the 14 years that followed the figure tripled to 20.5% in 1984. In fact one third of the total hospital beds are occupied by the people over the age of 70. (Fig. 12)

In case of the U.S. the elderly people who have certain health problems and need care but do not necessarily have to be hospitalized are normally cared at home or at nursing homes. But in Japan as the nursing homes are scarce, these elderly people, who can otherwise be cared at home or at nursing homes, tend to be hospitalized and often stay for a prolonged period of time. The average length of hospital stay in Japan tends to be considerably longer compared to that of the U.S.. The shortest stay is 14 days but in case of university hospitals it is often 30 to 40 days and can be as long as 60 days. It is reported that as a whole 40.6% of the

Fig. 13

Comparison of Numbers of Beds per 10,000 population Among 6 Countries

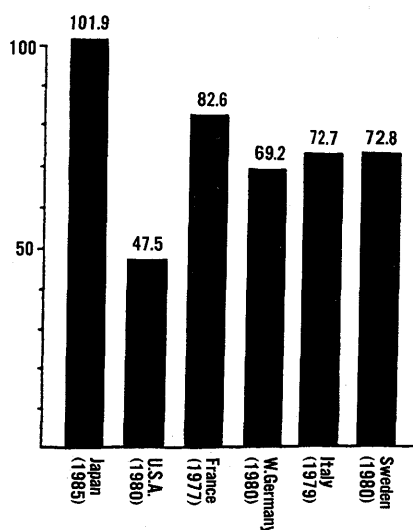
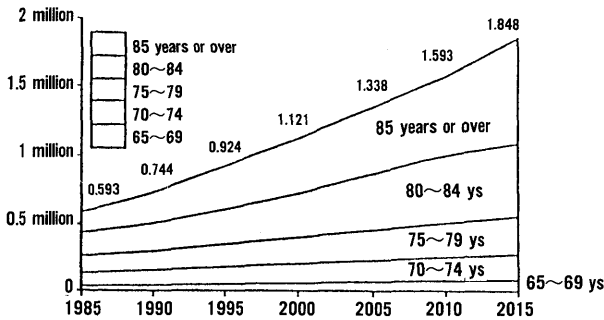


Fig. 14

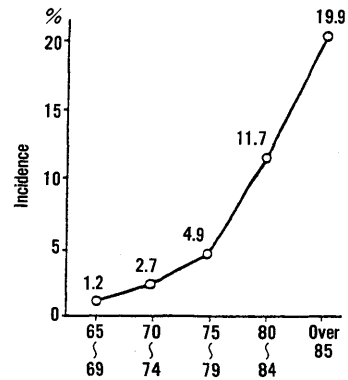
Trend In Estimated No. of Domiciliary Senile Dementia Patients



N.B. The estimation is based on the survey in 12 prefectures of Japan. The figures are obtained by multiplying the population in each age group with the ratio of domiciliary dementia patients in this survey.

Fig. 15

Progress of Aging and Incidence of Senile Dementia



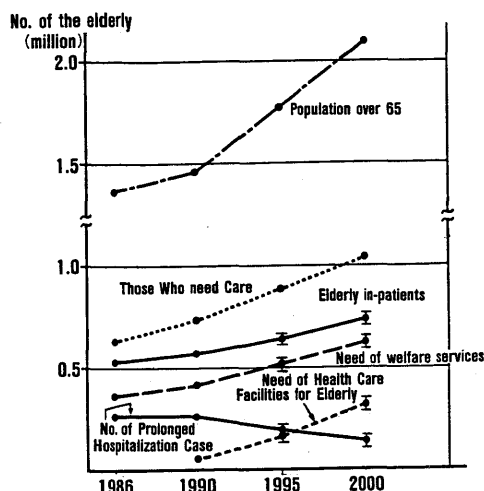
in-patients stay in hospital for more than 6 months and in case of the elderly in-patients (over 65) 44.7% stay in hospital more than 6 months. The overall average length of hospital stay in Japan in 1985 was 39.4 days, excluding tuberculosis and mental patients. One of the reasons for this prolonged hospitalization is abundance of hospital beds. There are 101.9 hospital beds per 10,000 people, which is nearly twice as many as in the U.S.(Fig.13) Another reason is the lack of proper checking function to investigate whether there are medically justifiable reasons to prolong hospitalization. In addition, fee-on-service system of health insurance payment, payment made against the quantity of treatment without taking into considerations the necessity of tests or treatments, contributes to this lengthy hospital stay through which hospitals can make financial gains.

The government is fully aware of the fact that the prolonged hospitalization of the elderly patients at general hospitals is unnecessarily pushing up the already large medical expenditure. In an effort to curve the medical expense, the government has created a new criteria of hospitals and trying to designate those hospitals with many elderly in-patients as 'geriatric hospitals'. The cost of hospital care at these geriatric hospitals are graded low in health insurance payment scale.

Senile Dementia Patients in Japan

Among the senile dementia patients in Japan there are Alzheimer dementia(type A) and cerebro-vascular dementia(type B). The ratio of A:B is 1:1.6. Among the dementia patients 340,865(1986) were hospitalized in mental hospitals (total number of mental hospitals 1,036) while over 600,000 patients were estimated to be looked after at home (1985). The total number of senile dementia patients will thus be around 940,000. It is estimated in the year 2015, there will be 1.85 million dementia patients, which is nearly twice more than the number in 1985. (Fig. 14) According to statistic estimate of appearance of dementia by 5-year age groups, 19.9% of those who are 85 or above are expected to suffer from dementia (Fig. 15). These figures clearly indicate an urgent need for more facilities for care of dementia patients. There are 257,000 in-patients in mental hospitals, out of which 82.7% stay in hospitals for more than 6 months.

Fig. 16 Future Need of Elderly Care



Faced with the marked increase of the elderly population of over 65 in Japan the government now encourages transfer of those who are prolonging hospital stay to either an intermediate facility called nursing homes or to their own homes. The government has designated some of the general hospitals, where there are a large number of geriatric in-patients, as 'geriatric hospitals', and they plan to increase its number. The government is encouraging the transfer of the geriatric patients, who need care but do not necessarily have to be hospitalized, to an intermediate nursing homes called 'Health Care Homes for the Elderly'.

Improved domiciliary care is another answer. In addition to the participation of public health nurses and registered nurses, paid services by auxiliary nurse or home

helpers, who assist with daily chores or cooking, are becoming available and also involvement of voluntary workers is encouraged.

As future strategies for elderly care the government plans to curtail prolonged hospital stay of the elderly patients by 1990 by reducing the number of beds in general hospitals and geriatric hospitals. Instead the government plans to increase beds in intermediate nursing homes. Fig. (16) shows that in spite of these efforts the number of elderly people requiring care will continue to increase because of the absolute increase of the elderly population. (Fig. 16)

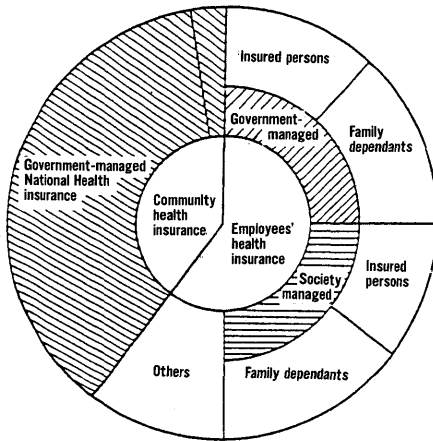
As of 1986 there were altogether 1,816,194 hospital beds. This is 1,000 beds per 100,000 population or 1 bed per 100 people, which is nearly twice the ratio in the U.S. (Fig.13) The hospitals designated as 'geriatric hospital' were 848 in 1988 with total beds of 119,227. The ratio of beds per population is 98.1 per 100,000. This is only one tenth of that of general hospitals which have 980 beds per 100,000. This means that a large number of geriatric patients are still hospitalized in general hospitals.

There are 'Skilled Care Nursing Homes' where the elderly patients who require specially skilled care are admitted. As of 1988 there were 1,855 such homes with total number of 135,182 beds, which is 111.2 beds per 100,000 population. The 'Health Care Home for the Elderly', which is an intermediate nursing home, are still fairly few. There are 631 such homes in 1989 and the total number of beds is only 4,723. In order to achieve better care for the elderly these beds should be increased. The present target of the government is 300,000 beds, which are sixty times more than the currently available beds. In order to achieve this goal the government is offering financial assistance to the private sectors in order to encourage their involvement.

These intermediate nursing homes were originally designed to provide a temporary shelter for those elderly patients with physical and mental problems who are discharged from hospitals. The government plans that the home will serve as an intermediate facility during the transition from

Fig. 17

Classification of Health Insurance Schemes of JAPAN



hospitals to individual homes and basically for short stays. However, due to cramped housing conditions in Japan with only the limited space available for each family, it is very often difficult to spare a room for the elderly person returning from the nursing home. This in return tends to hinder the elderly people from returning to their own homes. Moreover, because increasing number of women are working outside the home today, the manpower for elderly care within a family is very limited. It is therefore fairly doubtful whether these intermediate facilities will successfully function as temporary homes as originally planned, not allowing prolonged stay, sometimes until death, of the elderly patients. One possible function that can be expected from these intermediate homes is to increase the day care services to those elderly who are being cared at their own homes.

Medical Care Expenses and the Care of the Elderly

Before discussing the medical expenses and medical care of the elderly in Japan I would like to explain about the medical or health insurance system in Japan.

Since the introduction of nationwide health insurance coverage in 1961, individual medical expenses are on the whole covered by some form of public medical care. The current health insurance system in Japan comprises of 8 different health insurance schemes. (Fig 17) Everyone in Japan is registered under one of these schemes depending on the type of his/her employment. They are largely divided into the following two groups: 1) Employment based insurance for the employed persons and 2) Community based insurance for the remaining population.

The total national medical care expenditure for fiscal year 1985 amounted to ¥16,015,900 million

Fig. 18 Trends in National Medical Care Expenditure

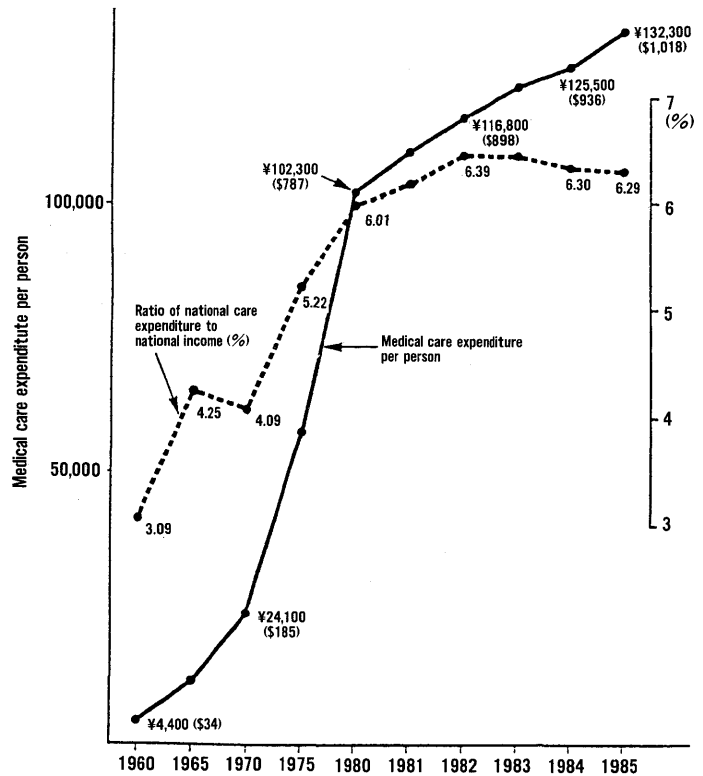


Fig. 19 Trend in National Medical Care Expenditure

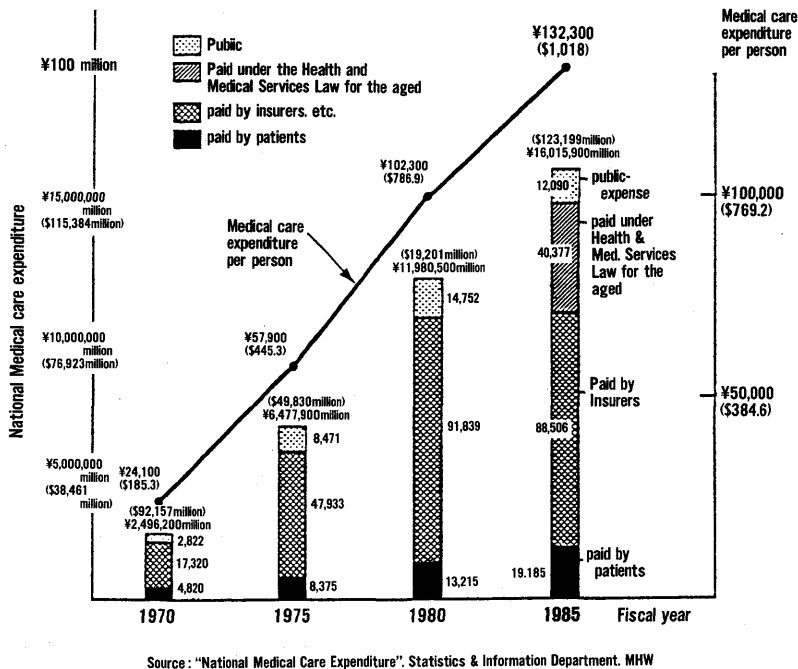
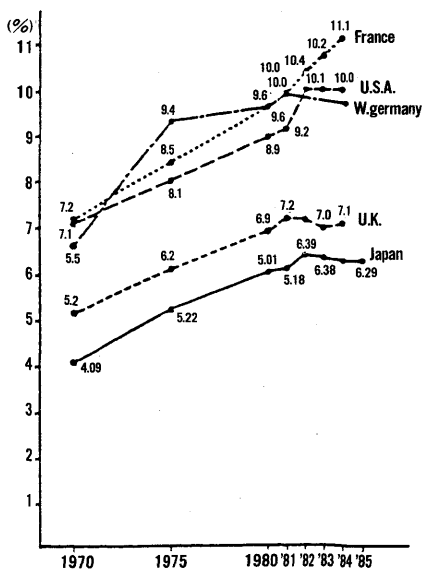


Fig. 20
International Comparison of National Medical Expenditures
(Ratio of Medical Expenditure Against National Income)



(US\$123,199 million) which was 6.29% of the national income. Fig. (18) shows the increase of annual medical care expenditure. The ratio of medical care expenditure in national income was 4.09% in 1970 but it steadily increased to 6.01 in 1980 and 6.29 in 1985.

Although Japanese economy has shifted to low growth in the recent years, medical care expenditure continues to expand at a faster pace than the increase of national income. The main factors of this increase are aging of the population, changes in the structure of diseases, and advances in medical sciences and medical technologies related to diagnosis and treatment of patients. One of the problems in the Japanese medical insurance system is the high ratio of pharmaceutical expenses. In 1985 it was 29.1% of the total medical expenditure. Another problem is prolonged hospitalization which I described before.

Per capita medical expenditure greatly increased between 1970 and 1980 and this upward trend

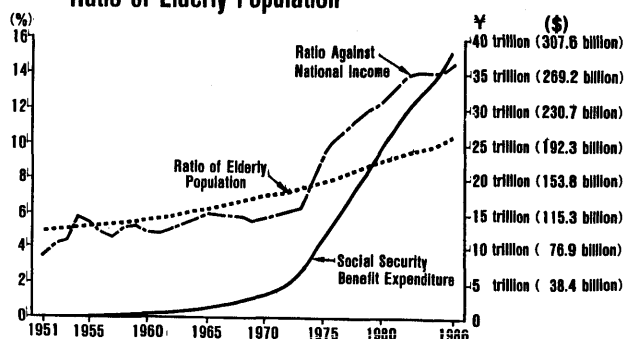
Table 3

Changes In Per Capita Medical Expenditure
(by age groups)

Age	1977	1981	1986
	¥ 67,600	¥ 95,900	¥122,600
0 ~14	¥ 27,700	¥ 35,900	¥ 43,700
15~44	¥ 47,100	¥ 56,800	¥ 62,400
65~	¥219,000	¥334,900	¥443,500

Age	1977	1981	1986
	\$ 520	\$ 737	\$ 943
0 ~14	\$ 213	\$ 276	\$ 336
45~64	\$ 765	\$1047	\$1239
65~	\$1684	\$2576	\$3411

Fig. 21

Social Security Benefit Expenditure,
Ratio Against National Income,
Ratio of Elderly Population

has continued ever since. (Fig. 19)

The medical expenditure for fiscal 1985 was ¥16,015,900 million (US\$124.3 million). This was 6.29% of the national income or 5% of GNP (8% of GNP in the U.S. and 7.5% in France). Per capita medical expenditure in 1985 was ¥132,300 or \$1,018. The ratio of national medical expenditure in GNP was lowest in Japan compared to that of France, West Germany, the U.S.A. and the U.K. (Fig. 20)

As shown in Fig. 19 the patients paid 8.3% of the total national medical expenditure and the rest was covered by various medical insurance schemes and a public fund such as Health and Medical Services Law for the Aged.

Table 3. shows the changes of medical expenditure by age group. Per capita medical expenditure of the age group of 65 or over doubled between 1977(\$1,684) and 1986 (\$3,411). This increase is no doubt greater than the increase of 45-64 age group, which increased 1.6 times during the same period.

Now we look at how social security benefit expenditure increased as the elderly population grew larger. As shown in Fig. 21 there was a sharp increase of social security benefit expenditure after 1970. This is partly due to the increase of the amount of various social security benefits but swelling elderly population no doubt pushed it higher. The social security benefit expenditure in 1986 was 14.6% of GNP, more than double the ratio of 1970 (6%).

The Health and Medical Services Law for the Aged was enacted in 1982 as "a comprehensive policy to ascertain health and appropriate medical care for the whole population in their old age, incorporating disease prevention, treatment, and rehabilitation, thus to achieve better health of the people and improve the welfare of the elderly people." The law is a measure to cope with the coming genuine aging society by improving the life of the elderly through medical as well as health services in order to ascertain better life for the elderly people. Under this law free medical care is provided for those 70 years or over, and also for those between 65-70 and having certain designated disabilities,

their medical expenses are covered jointly by the national government, local authorities and insurers of various health insurance schemes. However there are some nominal fees that the elderly are requested to pay : ¥800 (\$6.00) per month for out-patients and ¥400 (\$3.10) per day by in-patients. Low income elderly will pay ¥300 (\$2.30) per day for in-patient treatment for the first two months.

The monthly expense of those who are admitted to intermediate nursing homes is ¥260,000 (\$2,000) but the large part of this expense is covered by health insurance and public funds and an individual will pay ¥50,000 or \$385 per month.

What “Health and Medical Services Law for the Aged” Provides

In addition to the basically free medical care for those over 70 as well as over 65 with designated disabilities, the Health and Medical Services for the Aged Law offers the following services.

1. Individual Health Record Sheet is issued
 2. Health Education
 3. Health Counselling
 4. Health Check Up
 5. Rehabilitation Program
 6. Home Visiting by Nurses (for those over 40 with designated disabilities)
- As for health examinations anyone over 40 years old is eligible for the following.

Interview by physicians
Physical check ups (weight, height, etc.)
Blood Pressure Measuring
Urinalysis
Fundi Examination
Serum Cholesterol
Hemoglobin
Liver Function Tests (GOT, GPT)
Blood Sugar
Stomach Cancer check up (over 40)
Lung Cancer check up (over 40)
Breast Cancer check up (over 30)

The following are the goals which these service programs aim to attain eventually.

- 1) 30% reduction in mortality rate of stomach and uterus cancers within 10 years from 1982
- 2) 50% increase in early detection of lung and breast cancers
- 3) 60% increase in detecting high-risk cases of cardiac disease within 5 years
- 4) 50% decrease in CVA incidence within 10 years and 20% decrease in incidence of bedridden cases due to CVA
- 5) 50% increase in health check up rate of general public
- 6) 30% of public to receive stomach cancer check up by upper GI X-ray

30% of public to receive breast cancer check up

What We Need for Better Care of the Elderly in Japan

If the present pace of population aging continues it is estimated that in the 21st century there will be more than one million elderly people who require care, in contrast to the present 600,000 people. In order to cope with this prospect there should be more programs for domiciliary care such as day-care service, short period admission to nursing homes and home visit helpers. At the same time more 'Skilled Care Nursing Homes' should be built to meet the large demand of elderly care. Moreover, if those bedridden elderly patients, who are currently filling up the general hospitals, are to be transferred to intermediate nursing homes, it will require as much as 250,000-300,000 beds by the year 2000.

Some Personal Thoughts on Improvement of Elderly Care in Japan

As I have described above, Japan is following the process of population aging with the speed two to three times faster than other western nations. Just like a runner in a marathon race we have closely observed how these forerunning countries have coped and are coping with the problem of aging population and could vividly realize the problems which Japan will be facing in the near future. If we make careful study and analysis of various successful measures of the western nations we will be able to find some useful clues to solve the problem.

Although the ratio of the elderly people over 65 in the total population of Japan still remains at the level of 10% but in some remote rural areas, where there is population drain, the villages may have more than 20% of the elderly population. Japan is already facing the problem of population aging just as in western nations.

It is a fact that the more the elderly population increases the more the medical expenditure is required. In order to effectively curtail this increase the Ministry of Health and Welfare is now studying the measure. Today the whole population is covered by one or the other of the health insurance groups, and the medical expenses are paid to the hospitals and physicians on a piece-rate payment system or according to the quantities of treatment given to the patients. A joint commission comprising representatives from health admission bodies, Japan Medical Association and learned societies, functions as a mechanism to control this system.

The current ratio of medical expenditure in GNP against Japan is 6.3%, but it will become difficult to maintain this level. A certain amount of rise is considered to be inevitable but it will take some time before it reaches the level of western nations. The Japanese government however anticipates that it will be able to keep it below 7% level. The amendment of Health and Medical Services Law for the Aged and the increase of intermediate nursing homes are some of the chief measures to curtail the future rise of medical expenditure.

I think it will be possible to improve the welfare and medical conditions surrounding the elderly people without the increase in total amount of medical expenditure if we could successfully redistribute the amount of medical expenditure. Japan has twice as many hospital beds as the U.S.

and the elderly people are filling those beds with prolonged stay. It is possible to reduce the cases of hospital admission and shorten the length of stay of the elderly people if the options such as intermediate nursing homes and visiting nurses are sufficiently available and accessible. The government should provide adequate financial assistance to the private sector which is willing to build the intermediate nursing homes. It should also increase personnel who can visit the elderly people at home to provide necessary care. The qualified registered nurses who stopped working after marriage can be encouraged to take part in home care nursing and trained helpers on public subsidy and voluntary workers should also be encouraged to cooperate. Through these measures it will be possible to realize the underlying spirit of Health and Medical Services Law for the Aged and improve the level of medical and welfare care of the elderly people without inviting increase in overall medical expenditure of the country.

The most important thing which we should all remember is that the extended life of the elderly should not be wasted in loneliness and misery. It should be a life that is worthy of living.

The social security budget in Japan is comparatively smaller than the western nations but if we can rationally and effectively curtail the seemingly limitless increase of medical expenditure it will be possible to increase the budget for social security benefits.

Another aspect to assure better quality of life for the elderly is better housing conditions. In an urban environment perhaps we should consider high-rise apartments in order to secure some extra space in individual houses. More number of elderly people are living with their children in Japan compared to other western nations. If we want to maintain this level it is necessary to secure more space in a house on one hand and on the other there should be additional helping hands from outside, such as trained helpers subsidized by public funds, to assist the daughters or daughters-in-law who care the elderly. Housewives and elderly people who are healthy enough to work can be recruited for this purpose.

As the age of retirement in Japan extended from the hitherto 55 to 60 in recent years and even to 65 in future, it becomes increasingly important to create a social structure where there are opportunities for work and other social activities and learning for the elderly people. We should also give thoughts to the locations of the intermediate nursing homes, and build them in an urban environment as much as possible so that the people in these homes can communicate with the younger generations. Certain arrangements should be made for those elderly people who have the experience and ability to assist the educational programs for the younger people. These social activities will give the elderly people a chance to find a meaning in life and at the same time help them to stay mentally young.

If one wants to keep good health and enjoy longevity one must develop argeeeable life habits and build up a proper life style while one is in middle age : a life style which will enable one to detect and prevent in the early stage various diseases that may be gradually spoiling one's health, and which will prevent handicaps that might impair one's ability to move independently. For this purpose, public awarness on various diseases and appropriate programs for early detection of deseases is necessary.

In the case of Japan there is genuine awareness, among general public, that attaches great importance to better health. This is a very favorable circumstance for health promotion.

As 98% of junior high school graduates enroll in high schools for higher education there is a large majority of people who can understand the significance of enjoying and completing one's longevity in its full sense. The Japanese people as a whole understand the value of efforts for better life, but they should put more emphasis on practical actions toward better physical and mental health. For successful health campaign it is effective to train many health volunteer leaders from among the general public.

In a city of 40,000 population in a mountainous area of central Japan I have run a public health campaign program for 10 years in the past. The program was designed to improve the health of the population. In the program, among other things, I trained volunteer health leaders and then let them take an initiative in the front line of the campaign encouraging people to change life habits to create agreeable life style in order to prevent chronic diseases of adults. The campaign reformed people's awareness on health. NaCl intake from food was reduced by 20% ; people took physical exercise as a daily habit ; people became able to measure their own blood pressure at home and thus could control their blood pressure. Sphygmomanometers and stethoscopes were made available for their use and technical guidance was given to measure blood pressure correctly. The motivation for better health based largely on experimental learning gave a very favorable effect on life of the elderly population of the community. One of the results was 50% decline of CVA deaths in the campaign area.

To assure quality of life for the elderly individual families as well as community should try to prepare appropriate social, cultural and physical exercise programs for the elderly members. For those who are unable to be cared at home, adequate institutional care in intermediate nursing homes should be available in addition to adequate financial security through pension schemes.

Lastly I would like to call attention to the fact that among the 80 medical schools in Japan today, there are only 11 schools which offer a course on geriatric medicine with a full-time professor of geriatrics. For the sound development of geriatric medicine I sincerely hope that there will be a course on geriatric medicine in each and every medical school.

[The exchange rate of one American dollar was equivalent to ¥130 when this paper was prepared in April, 1989]

日本における老人医療の問題点とその対策

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要 旨

日本の人口は現在、急速に高齢化しつつあり、遠からず日本は世界の文化国家の中で最も老人人口の多い国となる。将来、予想される日本人の死因の変化、日本の老人の受療率、増してくる痴呆老人の実態、日本の医療費の割合などを米国の実態と比較検討した。最後に日本の老人問題への対応について私見を述べた。

キーワード

人口の老齢化 日本人の死因 老人の受療率 痴呆老人 老人医療費

まえがき

日本は、第2次世界大戦が終わるまでは、東洋においてはもっとも文明が進み、国民医療への公私の関心が強い国とみなされていた。

しかし、戦前は、結核患者をはじめとして、いろいろの急性伝染病の死亡数が多く、また乳児死亡率も非常に高く、したがって1935（昭10）年の平均寿命は男46.92歳、女49.6歳という50歳未満の短い寿命を示したのであった。

ところが、第2次世界大戦後、日本は米国から経済的ならびに衛生行政的援助を受け、あわせて伝染病に対する化学療法めまぐるしい進歩に出合うという幸運と、受胎調節の指導、環境衛生の改善、肺結核の集団検診や高血圧、癌、心臓病、糖尿病など、成人のかかりやすい慢性病の早期発見のための定期検診の普及がみられた。また、病気に対する予防のための健康教育の普及などの事項が相加わって、日本人の平均寿命は戦後10年ごろから急速に伸びはじめ、この傾向は年とともに増し、今日（1987年）では男75.61歳（米国白人男は72.0歳）、女81.39歳（米国白人女は78.9歳）と

いう世界でももっとも長寿の国となった。

しかし、そのためにもたらされたことは、国民人口構造の急速な高齢化である。

今日の日本には、この老人人口の増加によって生じる老人の医療上ならびに福祉上の問題が急速に表出し、その老人層増加のペースに比べて老人への医療および福祉行政の対応ペースは追いつかなくなっている。そのため、今日、日本の老人は健康上、生活上の数多くの難しい問題に直面しているのである。

以下、それらの問題を具体的に引き上げ、説明を加えたい。

日本の人口の老齢化の現状と将来

図1は、日本人の平均寿命（0歳のときの余命）の年次的推移を示したものである。

これによると、1935年は男46.92歳、女49.6歳に対し、第2次世界大戦終戦2年後には男女とも50歳を超え、終戦10年後の1955年には男63.60歳、女67.75歳と、男女を平均すると65歳を超えている。終戦30年後の

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1975 (昭50) 年には男71.73歳、女76.89歳となり、終戦40年後の1985年には男74.78歳、女80.48歳で、男女ともに米国人の平均寿命を明らかに超え、1988年には男75.54歳、女81.30歳となった。これは世界の長寿国のアイスランド、スウェーデン、オランダを追い越した世界記録である (図2)。

このように、日本人が長寿になったことの原因としては、なにより①結核死の激減、②その他の急性伝染病の激減と、③乳児死亡率の減少が特記される。

日本人の乳児死亡率が高かった原因の1つには、昔は日本人は多産であり、しかも小児の伝染病死や栄養不足による死が多かったことがあげられる。生後1年未満の乳児 infant の死亡率を歴史的にみると、日本は1925 (大正14) 年ごろはきわめて高く、出生1,000について150以上の死亡であったが、1940年には90となり、また戦後は急速に下がり、1960 (昭35) 年には30.7、1980 (昭55) 年には5.2となった。この乳児死亡率の急速な低下は他国に例をみず、現在では世界の最低国グループの1つとなっている (図3)。

さらに、全国民の人口1,000対の死亡率は、終戦2年後の1947年には、14.6であったが、1986年には6.2 (米国は1984年には8.6) となったことは、先に述べた乳児の死亡率の激減とともに、国民の健康状態が非常によく保たれたためであり、これらのことが日本人の平均寿命を極度に長くしたのである。

日本人の死因の変化

図4のごとく、日本人国民全体の1950年ごろまでの死因の最上位は結核や肺炎、その他の伝染病であったが、これらは1955年までに急速に低下を示すが、一方、1951年には脳卒中が増加して死因の第1位となり、第2位は悪性新生物、第3位は心臓病となった。1981 (昭56) 年には悪性新生物が死因の第1位、脳血管損傷が第2位、心臓病は第3位となった。1985 (昭60) 年からは第1位の悪性新生物はさらに増し、第2位は心臓病となり、脳卒中は第3位に下がるにいたった。

日本では長年死因のトップを占めていた脳血管病死が、1970年代になって急速に下がってきた理由は何であろうか。これは国民の健康教育により、それまでは国民の高い食塩摂取 (1日15g以上) が徐々に減ったことと、1955 (昭30) 年以後の国民の血圧測定を中心とする定期検診の普及による高血圧の早期発見および早期治療とが脳血管病死を著明に減少させたためであろう。近年は中年の高血圧による脳出血による死亡が減少したことは、乳児の死亡率の低下とともに、日本人の平均寿命の延長にもかなり貢献していると思う。

最近 (1987) の日本人の死因の上位の3疾患は図4のごとくである。近年の日本人の死因を欧米のそれと

比較してみよう (図5)。日本人はたとえ心臓病が第2位の死因になったといっても、これは欧米における心臓病死の高率に比べると日本人の心臓病死はなお非常に少なく、米国の心臓病死 (人口10万対313.5/1984) の約3分の1にすぎない。

一方、現代の日本の脳卒中死は減少したとはいっても、米国の約2倍である。その理由は、日本人と米国人との食事内容や食塩摂取の違いを主とする生活習慣の差がもっとも大きな原因として考えられる。

なお、癌死は日本人の間では胃癌による死因が最高であり、肺癌死がこれに次ぐ。しかし、胃腸 X 線検査および胃内視鏡による健診の普及により胃癌は早期に発見され、手術によって根治するケースが増加している。

このことのほかに、食塩摂取の減少や食事の欧米化も胃癌を減少させているものと推定される。しかし、大腸癌は、年々少しずつ増している。

なお、脳血管損傷と心臓病死の日米国民による死亡率の差を長い期間にわたって観察した日本とハワイとの研究 (図6) では次のことがわかった。すなわち、ハワイ在住の日本人は20年間に心臓病死がふえ、脳血管損傷は減少している。今日ハワイにおける日本人の心臓病と脳血管損傷死の型は白人のそれにほぼ一致している。これは日本人の生活スタイル、とくに食事習慣が日本食からアメリカ風になってきたことがもっとも大きな原因と考えられる。

今日、日本人、特に若い世代の人が食事の欧米化の傾向をますます強めて、動物性脂肪や糖分の摂取が米国人に接近しつつあり、また肥満も増す傾向があるが、これが続けば、将来日本人の間でも、虚血性心臓病死の増加傾向は続き、そのため、今日のごとき平均寿命の長さを、今後維持することが困難となる因子が加わるかもしれないことが危惧される。

今日、日本では成人の変成性慢性病予防の取り組みが政府および民間で真剣になされている。日本では慢性の変成疾患予防のための生活スタイルの変容とその疾患の早期発見のための定期的検診の普及に厚生省も民間も非常な努力を払っている。国民側の協力がさらに得られれば、ここ数年の間の平均寿命のひき続いての延長はなお期待できるかもしれない。しかし、それだけに高齢人口の増加は避けられない。

日本の65歳以上の老人の人口は1985 (昭60) 年にはじめて10%を超えて10.3%となり、人口の老齢化が国をあげて問題にされるようになった。1987年には65歳以上の人口は全人口の10.9%となった。2000年には16.3%、2020年には23.6%となると推定される。日本の老齢化は欧米に比しスタートは非常に遅れたが、図7のごとく、上昇曲線は急峻であり、世界の中で老人

人口がもっとも多い国になることが予想される。米国は65歳以上の老人人口が全人口の7%になったのは1945年であり、14%に倍増するのは2020年で、それまで75年を要するようであるが、日本では65歳以上の老人が7%になった1970年のわずか26年後の1996年には人口の14%が65歳以上になるわけである(表1)。

以上のごとき急速な高齢化は、日本の将来に労働人口の減少をもたらす一方、老人がふえるために老人の年金や医療費が増加し、それが労働人口の負担となるという社会的、経済的問題が生じるわけである。そこで、老人医療費について言及することにしよう。(図8)

日本の老人の受療率

1970年度の調査では、70歳以上の老人の受療率(図9)は、人口10万につき10,797人、すなわち約1万1,000人であったが、1984年度には70歳以上の者の受療率は10万中19,936人、すなわち約2万人で、これは1970年度に比して14年後の1984年には約2倍にも増加していることになる。これは、年々老人人口が増すことが、受療する老人の数の増加をもたらしていることを示している。

今日日本では70歳以上の老人のかかりやすい疾患は、脳血管疾患、これには5人に1人がかかっているが、これに次ぐものは消化器疾患、次いで呼吸器疾患である(図10)。

次に、老人の65~74歳までを前期老人(A)、75歳以上を後期老人(B)と呼ぶと、表2(1986~1987)のごとく、Aは人口1,000人につき615.6が有病者であるが、Bでは691.9人となり、75歳以上の老人の有病率は約70%に上る。また、日本人は米国人に比べると寝たきり老人が多いことが特徴であるが、これは日本人の量の上での寝起きの生活習慣が影響する。寝たきり老人は、Aでは人口1,000人につき6.9であるが、Bでは35.1となり、75歳以上の老人の約3.5%が寝たきりということになる。欧米人のごとく、朝ベッドから起きて椅子に座る習慣でなく、量の上に布団を敷いて寝、布団の上で食事をし、また敷布団の上に寝るということの連続が手足の廃用症候群としての体の動きが困難になる結果を招く。

このA、B群につき、子との同居率を調べると、Aは59%、Bは73%が子供と同一世帯で暮らしているというデータが報告されている。日本の都会では、日本人は最近、親子の世帯が別居するという傾向が米国に似て多くなりつつあるが、全国的調査ではまだ高齢者は子と同居する者がかなり高率といえる。

また、親または子にアンケートをとると、年齢をとっ

てから親子が同居を希望するものは過半数である。しかし一方、日本は年々平均世帯人員の数は減少し、また核家族化の傾向がみられる。すなわち2025年に向かっての推測では平均一世帯人員は2.62人と低下し、そのため高齢者単独世帯数は1970年を100とすると2000年には約5倍、2025年には8倍以上の増加が予想される(図11)。このことは高齢人口をケアする病院または老人ホームが今日よりはるかに多数必要とし、また老人のケアにあたるナースや補助者の数も多くを必要とする事態が必ず生じる。今日の日本の病院での病床数に対するナースの数は米国の数の約3分の1である。

ここで70歳以上の老人の入院および外来患者の比率の変化をみると、1970(昭45)年には70歳以上の老人は入院・外来あわせての患者の6.5%であったが、1984(昭59)年は20.5%と、14年間に約3倍増加している。そして入院ベッドの3分の1は70歳以上の患者で占められているという現実である(図12)。

日本ではナースিংホームが非常に少ないため、米国ではナースিংホームまたは自宅療養ですむ程度の軽症の病気や障害のある老人が一般病院に長期入院をしている。そのためにどの病院の入院患者の平均在院日数も米国に比してきわめて長い。最短が14日、多くの大学病院では30~40日、最長は60日にもなっている。入院患者の40.6%は6ヵ月以上の入院であり、65歳以上の44.7%は6ヵ月以上の入院である。このように入院期間の長い原因の1つは、日本は米国に比し人口1万対比で101.9、すなわち米国の約2倍もの病床があるからで、政府は一般病院に老人が長期入院することは医療費をも不必要に増すことを招くという問題を深刻に考え、一般病院の中で老人の入院比率の高いところは、入院料の保険請求費の少ない老人病院と指定する方向で指導をしている(図13)。

次に老人のばけ患者について述べよう。

痴呆老人の実態

日本の痴呆老人にはアルツハイマー型痴呆型(A)と脳血管系痴呆型(B)とがあり、両者の比(A:B)は1:1.6である。全国の特養施設(1,036施設)に入院中の痴呆老人は34万865人(1986年)を数え、在宅痴呆老人の数は1985年(昭60)は60万人、痴呆老人数は合計94万人と推定される。これは2015年には185万人となることが推定されている(図14)。この数は1985年度の痴呆老人の数の約3倍である。なお、65歳以上の5歳台別の統計では図15のように、85歳以上の老人の19.9%が痴呆になる。その意味で、痴呆を扱う施設の急増設が必要となるわけであるが、その82.7%は6ヵ月以上の入院である。

日本における65歳以上人口の増加率をふまえて、政府は長期に入院している老人患者をできるだけナーシングホーム、または自宅で療養することを勧めている。すなわち、政府は一般病院の中の老人収容の多い病院を老人病院と指定し、これをふやし、病院に入院しなくても看護を主としたケアですむものを老人保健施設（中間施設）と名づけたナーシングホームに入院させ、一方、在宅ケアをすすめる、そのためには保健婦、ナースにあわせて、補助者としての有料ヘルパーの家庭訪問ケアやボランティアの参加を勧めている。

政府は今後の医療政策として、老人の長期入院を1990年以降は低下させ、中間施設（老人保健施設）を増床するという方針をたてている。なお、それでも老人層が増大するために入院老人の数は増し、また介護を要する老人もふえるという予測が図16に示されている。

1986（昭61）年の時点で、日本では病床数は全国で181万6,194床あり、これは人口比では、人口10万人に102人、すなわち人口100人に1床となり、米国の病床数の率よりはるかに多い。現在老人病院とされている病院数は848ヵ所（昭63）で、11万9,227床を有しており、人口10万対比では98.1となる。これは一般病院の病床が人口10万対約980という数と比べると、その約10分の1で非常に少なく、大部の老人が一般病院に入院していることがわかる。

Skilled nursing careを要する老人患者の入院する特別養護老人ホーム（skilled care nursing home）は全国で1,855施設ある（昭63）が、病床は13万5,182床で人口10万対111.2である。また、老人保健施設（中間施設 intermediate nursing home）は全国にはいまなお631施設（1989年2月）で、ベッド総床数は4,723床にすぎない。この数は今後急速に増加されなければならないとされ、政府は民間にこの施設をつくるための経済的援助を行い始め、政府は21世紀に向けて中間保健施設を今日の約60倍の30万床に増加することを到達目標として掲げている。この中間保健施設は、長期化した心身の障害をもつ老人を収容して看護を中心とするケアを行うところにある。ここを長期間滞在させるという場にせず、病院退院後自宅療養までの移行期にケアを与える施設であるとしたいと政府は考えているが、患者をうけ入れるための日本の大都市での住宅空間に余裕のないことや、女子の就職傾向にある日本では、老人を在宅でケアする家人の人手が少なくなる一方である今日の社会事情では、中間施設での長期滞在、死亡するまでの入所をどういともめるかは、解決至難な問題である。在宅老人のケアを援助する一策としての外来老人のデイサービスのプログラムは少しずつ増加されている現状である。

日本における医療費と老人医療

日本における医療費と老人との問題を論じる前に、日本の医療保険を説明する。

日本では1961年に全国民の医療保険制度が実施以来、だれもがその医療費は何らかの形で支給され、必要な治療を受けることができる。（図17）

現在の医療保険システムは8つの違った種別のものから成り立ち、国民の働き場を中心にいろいろの集団の保険システムがある。しかし大要のものは2つに分かれ、被雇者のための被雇者保険（employees' insurance for employed persons）であり、もう1つは他の地方在住の人のための地域保険（community insurance for other regional residents）である。

日本の国民の1年の医療費は、1985年は16兆159億円（123,199 million dollars）で、これは国民所得 national income の6.29%である。図17は国民医療費の年々の増加を示す。国民所得に対する国民医療費の比は、1970年は4.09に対し、1980年は6.01、1985年は6.29と徐々に高くなっている（図18）。

近年の日本経済成長は低調を示しているが、医療費は国民総収入の増加率よりも増加率は高い状態を続けている。医療費増加の主な原因は人口の老齢化、疾病構造の変化及び医学の進歩による診断や治療の高技術化による。日本の保険診療での問題の1つは、全医療費の中で薬剤費の比率が高く、即ち1985年度予算の29.1%となっていることである。もう1つの問題は、入院期間の延長で、1985年度の平均1人の患者の在院日数は、39.4日とされ、これには長期入院治療を必要とする結核や精神病は除いている。

国民1人についての医療費は図19に示すごとく、1970年から1980年にかけて急増し、以後は徐々に上昇増加の傾向を続け、1985年の国民医療費は16兆159億円（\$123,199 million）で、これは国民総収入の6.29%、GNPの5%に当る（米国はGNP比8%、フランスは7.5%）。1985年の日本人1人の医療費は132,300円、すなわち1,018ドルである。

この医療費の支払いは図19のごとくで、患者自身による支払いは全額の8.3%で、他の保険および老人保健法（health and medical services law for the aged）その他公費で支払われている。

この日本の国民医療費を他の国々と比較すると（図20）、日本はフランス、西ドイツ、米国、英国に比して、医療費の対国民所得または対GNP比はもっと低い。

次の表3は国民医療費の推移を年齢階級別にみたものである。これによると、1986年の65歳以上の老人の1人当り年間医療費（3,411ドル）は1977年の医療費（1,684ドル）に比べると約2倍以上増加している。こ

れは45～64歳代の人の1977年から1986年にかけての一人の医療費の増加率（1.6倍）より明らかに大きい。

なおここで国民の社会保障給付費は老人人口の増加によっていかに増えているかを調べてみよう。図21のごとく、1970年からの増加には著明なものがある。これは、国民平均1人の給付費の増加に併せて老人人口比率の増加がこの結果をもたらせたものである。社会保障給付費の対国民所得比は14%であり、1970年頃（6%）に比して2倍以上増している。

老人保健法は、老人の医療の質の向上と経済性を考えて1982年（昭57）に制定されたがこの法律は「国民の老後における健康の保持と適切な医療の確保を図るため、疾病の予防、治療、機能訓練などの保健事業を総合的に実施し、もって国民保健の向上及び老人福祉の増進を図ること」を目的とする。この法律は来るべき本格的超高齢社会の到来に備え、老人医療と保健の両面から老人の生活をより健やかなものとすることを目指して、1982年制定されたものである。これは70歳以上の老人と65～70歳のねたきりのもの（with designated disabilities）には、国や地方公共団体（rural authority）のほか、保険者 insurer が共同で医療費用を拠出するわけである。老人の外来治療には、当人は払わずに月800円（6ドル）払いさえすればよく、入院最初の2カ月間は1月に10,400円（80ドル）ずつ個人が支払うことになっている。低所得の老人が入院すると、最初の2カ月は1日300円（2.3ドル）払うことになっている。

老健法で定められた保健事業としては70歳以上、または65歳以上のねたきり老人の医療の公費支給のほか、40歳以上の者に次の保健事業が提供される。

1. 健康手帳交付
2. 健康教育
3. 健康相談
4. 健康診査
5. 機能訓練
6. 訪問指導看護（保健婦）

（これは40歳以上でねたきりのもの）

健康診査としては40歳以上であれば以下の検診が受けられる。

健康診査、問診、身体計測、血圧、検尿、ECG、眼底検査、コレステロール、貧血、肝機能（GOT、GPT）などの検査を行う。

子宮癌検査を30歳以上のもの。

胃癌検診を40歳以上のもの。

肺癌検診を40歳以上。

乳癌検診を30歳以上のものに行う。

保健事業の目標としては、

胃癌、子宮癌に関しては、1982年（昭57年）よりの10年間に死亡率を30%減少させる。

肺癌、乳癌については5年間に早期癌発見率を50%高める。

心臓病に対しては5年間にハイリスク者の把握を60%高める。

脳卒中については10年間に発生率を半減させる。脳卒中によるねたきり老人の発生を20%下げる。

健康診査は受診率を住民の50%にする。

胃癌検診は住民の30%、子宮癌検診を30%に行う。

老人保健施設の整備の水準

現在の高齢化の進展が将来も変わらないとすると、現在60万人程度と推定される要介護老人は、21世紀には100万人を越えるものと見込まれている。今後ともデイ・サービス、ショート・ステイ、家庭奉仕員の充実を図り、在宅福祉の基盤作りを進めて行くと共に、特別養護老人ホームなど積極的な要介護老人対策を進めていく必要がある。これに加え、さらにねたきりの長期入院老人の相当部分が、老人保健施設でサービスを受けることができるようにするためには、2000年までに26万～30万床程度を目途に、老人保健施設を段階的に整備していく必要がある。

まとめ：日本の老人問題への対応についての私の考え

今まで述べたように、日本は西欧の文明国がたどった人口高齢化の道を約2～3倍ものスピードで走りつつある。

欧米国が老人問題に対して様々な対策をしているのを、私たち日本人は、その後を追いつつ眺めてきた。先に走るマラソン・ランナーの走りぶりの中に、近く日本が直面するであろう問題を如実に見ることが出来る。高齢化への先進国のよき対応の諸相を分析することにより、日本が急速に高齢化することによって生じる問題解決のヒントが与えられるものと思う。

今、日本は全国的には65歳以上の年代層がようやく10%を超える程度に止まっているが、都会から離れた田舎に行くと、すでに65歳以上の老人が20%という過疎の村もあり、そこでは、日本はほぼ欧米並みの老人問題に直面しているともいえるわけである。

老人人口が増すことにより、医療費がどんどん上ることへの防止対策は、今日厚生省が懸命にとっているわけである。国民皆保険である日本の診療システムは、その医師や病院の報酬は、出来高払いであるが、この診療費請求のコントロールは、行政と保険者と日本医師会及び学識経験者からなる中央社会保険医療協議会を中心になされている。

医療費の値上げと国民総収入との比を今のレベル6.3%より抑えることは困難で、この比率は恐らくごくわずかつ上と思うが、欧米のような高いレベルに達するには年数がかかると思う。

しかし、医療費の国民総収入との比率が7%を超えることを日本政府は抑制できると考え、そのために政府は老健法や中間施設の急速な設置を中心に政策を立てている。

私は、今日の医療費の総額を増さないでも、その配分を変えることにより、老人の福祉と医療の条件が合理的により方向に前進するものと思う。

即ち、日本には人口の割の病床数は、米国の2倍多く、特に老人が長期入院している実態をふまえて病院入院数を抑え、在院期間を短縮させることは今後可能と思う。病院と家庭生活との中間となるナーシング・ホームを民間が作ることを、政府は経済的に十分に援助すること、また在宅ケアができるように訪問するナースの数を多く作り、看護婦の資格があっても職場で働かず、家庭内にとどまるナースを動員すること、公費補助のヘルパーの派遣やボランティアの協力を得れば、医療費の急な上昇なしに老健法の精神が老人の医療レベルアップを来すことが期待されると思う。

しかし、私たちが最も考えなければならない重要なことは、延長された老人の命がミゼラルな淋しいものでなく、いのちに生き甲斐を与えるものとするところである。

日本では老人の生活を支える社会保障の予算が欧米に比しまだ少いが、医療費の野放しの増大を合理的に抑制すれば社会保障へのより多くの増額が可能と思う。

次に老人の quality of the life を豊かにするには、住いの環境の改善が急務である。特に都会では、住居の高層化をすすめることにより、住居用のスペースを増させるような配慮が必要である。老人と子供との同居率は日本は欧米に比べて高いが、これが今よりも下らぬようにするには、今述べた住居の空間の拡大策と、老人のケアの主な荷い手になっている娘や嫁への人的援助の手が必要である。これには公費によるヘルパーを多く動員すべきである。これにも中年の女子や老いても健康な老人に幾分その役を与えるべきである。

日本人の定年は今までは従来の55歳から60歳になり、さらに65歳に延長の見通しがあるが、65歳以上の者にも職を与えとか、老人に社会活動や学びの場を与えるような社会機構が必要である。

中間施設もなるべく都会に近いところにもうけ、また入居者が若いものとのタッチが出来るような配慮が必要である。この老人の中には、子供の教育を援助する能力のあるものが多いので、このような子供の学習のプログラムに老人が参与できる策が必要である。老

人は社会参加によって、生き甲斐を感じ、また社会活動を続けることにより、精神的な若さを維持することができよう。

さて、健康で長寿を楽しむには、老人のからだの中に徐々に進行する病気を早期に発見して悪化を防ぎ、独立して行動することを困難にさせてハンディキャップを老人が負わないように、中年の頃から健康維持でできるようなよい生活習慣に一般人を置くべきだと思う。それには、病気の知識や病気の早期発見のプログラムが必要である。日本ではこの両者に対しては、国民の全体の意識が健康を重視する方向にかなり行っているので、このことは、はなはだよい条件となるものと思う。

日本人は、中学校卒の義務教育を終えたあと、国民の98%が高校に入学する。したがって健康な長寿を全うすることの意義が理解できている人が多い。生きるために努力することの意義を知る日本人が、単なる知識から脱して、もっと心とからだの健康への実践行動を行うことが必要と思う。これには、一般人の中から健康運動キャンペーンのボランティアのリーダーを数多く作りあげる事が有効である。

私は、日本の中部の山の多い地方の人口4万人の1都市で、10年間、住民の間の健康作りを目指して、ボランティアのリーダー養成に努力してきた。彼らを前面に押し立てて、彼らにイニシアティブをとらせ、国民の成人病予防のためのよい習慣形成のキャンペーンを行ってきた。それにより住民の意識が変り、食塩摂取は2割きり下げとなり、運動の習慣がかなり普及した。まためいめいの血圧が家庭で測れるような訓練をすることで、血圧の自己管理ができる住民を育てた。そのためには彼らに聴診器と血圧計を与え、その測り方の普及をはかる技術指導をしてきた。このような体験学習を主とした国民の健康保持への動機付けが老人の寿命にも非常によい刺激を与えた。結果としてこれによって脳卒中死は激減した。

私は老人のためには、老人の好む仕事や社会的文化的活動や運動グループのプログラム参与を家族や地域全体で老人のために勧め、また家庭で生活したい老人には家庭の雰囲気や中間施設を提供することが老人への十分な年金提供などの生活保障と共に大切だと思う。

最後に、日本には、80の医学校があるが、その専任の老年医学教授を置いた老人医学の講座はない。将来の老人医学のまともな発展のために、すべての医学校に老人の講座ができることを期待するものである。

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