Challenges of the Graying Society

– Japan-U.S. Health Care in Comparison –

By Nobuo Koinuma

Japan accounted for 14% of the world pharmaceutical market in 1984, second only to the United States' 22%. Japan's own production of pharmaceuticals was worth ¥4.3 trillion in 1986, equivalent to 1.3% of its GNP. And while pharmaceuticals (for outpatient use only) now account for just 8% of national health expenditures in the United States, in Japan the figure is a sky-high 29%. Amazingly enough, this is actually down substantially from the 45% figure posted in the early 1970s. Nonetheless, it is clear testimony to the importance of pharmaceuticals in health care in Japan today.

The separation of dispensaries and medical practices has long been one of the givens of health care in the United States and Europe. In Japan, however, the legislative framework for this separation dates back only to 1956.

Drugs from doctors

The percentage of separation is still a low 10%. Approximately 100 million prescriptions were written in 1984, but medical institutions issuing prescriptions for use at pharmacies accounted for only 20% of the total; the remaining 80% were filled by the hospitals' and clinics' own dispensaries. Pharmacies handling prescriptions issued by hospitals and clinics accounted 40% of the total.

Critics argue that the separation of medical practices and dispensaries both improves the quality of doctors and protects the patient's right to know what drugs he or she is taking. At the same time, however, there is a deeply entrenched belief in some quarters that it is more reassuring and convenient to buy medicine directly from the doctor responsible for one's care.

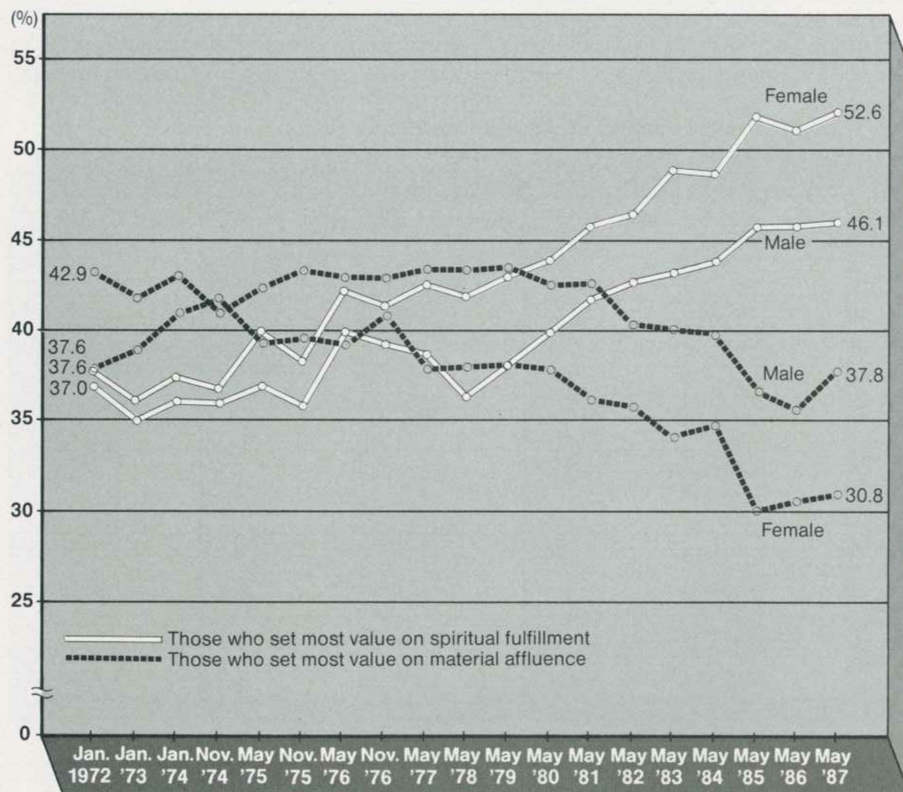
Defenders of the present system also charge that separation would result in excessive fees for prescriptions and making up medicines, and would blur responsibility for mistakes and other problems involving prescription drugs. According to one recent public opinion poll, only 35% of respondents thought the separation of medical practices and dispensaries would take hold in Japan, 40% thought it would not, and 25% were undecided.

Transformation in care

There have been tremendous changes in Japan's health care environment in recent years. The nation has grown powerful, living standards have improved, and there have been great strides in science and technology. At the same time, however, the increasing number of old people in the population, progress in internationalization, the shift to an information-oriented society, and rising political and economic pressures have brought their measure of new stresses and strains. Moreover, as more and more of the conditions for a bountiful life have been met, the perceptions, values and needs of the Japanese people have become more diverse. Today people are seeking a higher quality of life and spiritual fulfillment (Fig. 1).

The medical field has been no exception to these trends. There is growing interest in such issues as the creation of more "humane" hospitals, whether or not to tell cancer patients the true nature of their illness, definitions of brain death and care for the terminally ill. Patients are asking for accurate and useful health care information, for the right to have their opinions heard in health care decisions,

Fig. 1 From Material Affluence to Spiritual Fulfillment



Source: Public opinion poll

and even to choose, within reason, their own treatments.

In response, health care authorities are shifting the focus of their policies from quantity to quality, and from hardware to the improvement of services. Improving the quality of life for each individual has become a top policy issue. Specifically, this involves a reassessment of the Medical Services Law (including the revision of restraints on advertising and other provisions) and a new focus on regional health care planning intended to create systems for providing health care in line with the real needs of the community (including a more appropriate distribution of health care facilities and limits on hospital beds).

Hospital guidelines

To resolve the problem of long-term hospitalization for the elderly, administrators are pushing plans to create intermediate care facilities to serve as a bridge between today's hospitals and special nursing homes for the aged. Medical associations and hospital associations are also showing more interest in developing guidelines for evaluating hospital functions and for deciding hospital admissions and discharges.

Moves are also well under way to reorganize the medical industry, including the incorporation of hospitals into chains and diversification by hospitals into related fields. Examples of the latter include the provision of home nursing services and the construction of health clubs on hospital premises. While there is no denying the feeling that Japan still lags behind the U.S. in this regard, the nation's hospital management has clearly entered an age of full-fledged competition and natural selection.

The fee-for-service system under Japan's national health insurance program makes it easier to obtain treatment, and gives an incentive for medical institutions to provide better care. At the same time, however, critics argue that it also encourages unnecessary examinations and overprescribing of medication, and has encouraged the trend toward extended hospitalization. Moreover, the graying of society and the accompanying rise in the incidence of chronic ailments, progress in medical science and medical technology, the quantitative expansion on the health care provision side as seen in the number of doctors and hospital beds, and the growing preference among patients to go to large hospitals has sent national health expenditures climbing at a pace outstripping growth in real incomes.

In the years following the inception of national health insurance in 1961, national health expenditures grew by an alarming 20% annually. Since 1979 the rate of growth has dropped to the one-digit range, but nonetheless it has continued to grow by ¥1 trillion annually. In 1985, spending on health care reached ¥16,015.9 billion (approximately $67 billion at the then exchange rate of ¥239/$), or a full 5% of GNP.

Spending on elderly

The increase in spending on care for the elderly, treatment at hospitals and hospitalization has been particularly striking. With these medical expenses being paid for by insurance fees and taxes, the health care burden on taxpayers has risen substantially. The more efficient use of Japan's medical resources and the rectification of national health expenditures has become one of the most pressing issues in public policy.

By comparison, the growth rate in national health expenditures in the United States was in the double-digit range every year from the 1970s through to 1983, far outstripping growth in GNP. In subsequent years growth fell to the one-digit range. Nonetheless, national health expenditures as of 1986 stood at $458.2 billion, or 11% of GNP (Table 1). Thus despite the marked differences between the health care systems in the two countries, both Japan and the United States find themselves facing such common challenges as soaring medical costs, a glut of doctors and conflicts between economic principles and the qualitative demands of health care. Given the expensive equipment and high technology used in modern medicine, it is more important than ever to make wide-ranging forecasts and strike a balance between often-conflicting needs.

As the increase in the proportion of old

Table 1 Comparison of Japan-U.S. Health Expenditures

	Total ($ billion)		Per capita ($)		Percentage of GNP		Increase over previous year (%)		GNP growth rate (%)	
	Japan	U.S.	Japan	U.S.	Japan	U.S.	Japan	U.S.	Japan	U.S.
1965	3.1	41.9	32	205	3.3	5.9	19.5	–	13.3	–
1970	7.6	75.0	73	349	3.3	7.4	20.1	12.3	15.8	7.6
1975	21.8	132.7	195	590	4.3	8.3	20.4	12.1	10.2	9.5
1980	52.8	248.1	451	1,054	4.9	9.1	9.4	12.7	8.7	10.4
1984	63.4	391.1	527	1,597	5.0	10.4	3.8	12.0	6.7	8.3
1985	67.0	422.6	554	1,710	5.0	10.6	6.1	8.1	5.9	6.2
1986		458.2		1,837		10.9		8.4		5.2
1987		496.6		1,973		11.2		8.4		5.3
1990		647.3		2,511		12.0		9.2		6.9
1995		999.1		3,739		13.4		9.1		6.6
2000		1,529.3		5,551		15.0		8.9		6.4

Notes: 1. Some health expenditures are defined differently in Japan and the U.S.
2. Conversion rate '65 $1=360 '70 $1=330 '75 $1=297 '80 $1=227 '84 $1=238 '85 $1=239
3. Figures after 1987 are estimates.
Sources: National Health Expenditures, Ministry of Health and Welfare (Japan)
Health Care Financing Review, Summer 1987 (U.S.)

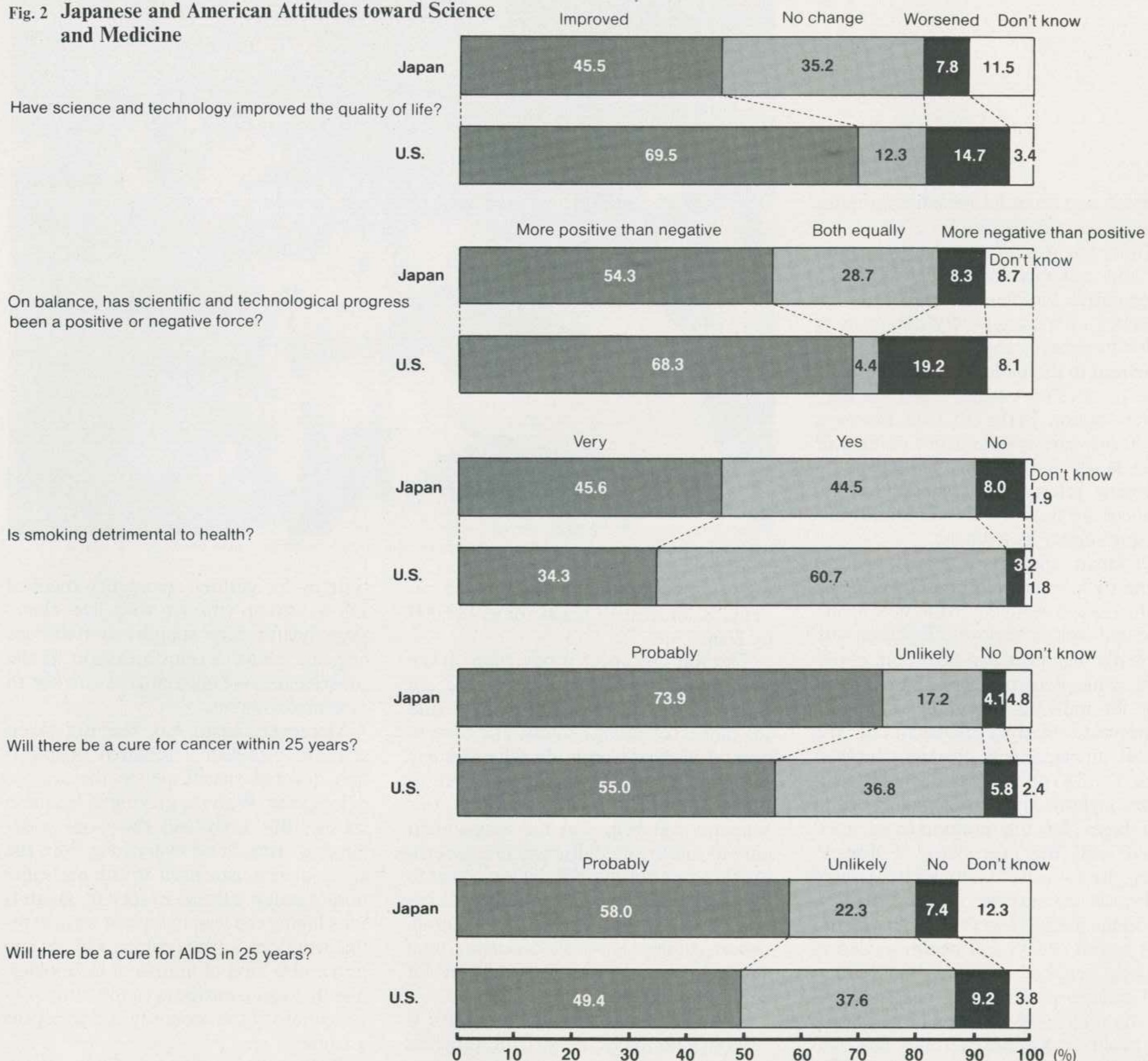


Fig. 2 **Japanese and American Attitudes toward Science and Medicine**

Note: Survey conducted in March 1987 in Japan and in December 1985 in U.S.
Source: Public Opinion Poll on Science-Technology and Society, Prime Minister's Office

people in Japanese society takes hold in earnest, it is essential in the interests of maintaining the vitality of society that the present national health insurance system continue to function stably and adequately in providing health care to the people. For this to happen, it is necessary to hold down the growth in national health expenditures to reasonable levels, that is, to within the growth rate for national incomes.

There are a number of approaches to achieving this goal. One is to promote habits or activities that help maintain good health and develop countermeasures to forestall and minimize degenerative diseases. Another is the development of community health planning, including restricting hospital beds and strengthening the links among medical institutions. At the same time, Japan can work to unify the insurance system itself to maximize equality in burdens and disbursements, and seek to rationalize both reimbursement of claims for medical costs and improve medical audits. Much has already been done in these areas, with the result that the growth in national health expenditures has slowed markedly since 1983.

While Japan's battle with national health expenditures has been carried out within the framework of preserving the existing health care system, the United States has seen a range of bold measures aimed at fundamentally revamping health care in that country.

The U.S. government has adopted the prospective payment system (PPS) and diagnostic related groups (DRG) for Medicare. Peer review organizations (PRO) have been created to provide a watchdog function for medical care. HMO and other contractual group health care organizations have been carefully

Japan is proud of the high quality of its health care system, which provides for regular check-ups for infants, schoolchildren and the elderly.

fostered, and financial subsidies for training new doctors slashed.

There are also moves afoot to systemize and quantify health care through comparative studies of different approaches to treatment. By determining which treatments are most effective and beneficial to the patient, it becomes possible to develop policies keyed to each therapy option. In the U.S. case, however, the health care system is not monolithic as in Japan. It is possible to implement sweeping reform of individual components of the system without radically disrupting society as a whole.

In Japan, changes in society and the economy have created more diverse and sophisticated needs for insurance, health care and welfare services. Together with the early diagnosis and treatment of disease, it has become increasingly important for individual citizens to practice appropriate lifestyle management and health management throughout their lives. The 850 public health centers located throughout Japan are, in effect, frontline bases for the promotion of good health and the prevention of disease. There are few other examples to be found of health centers and other medical institutions joining together to provide infant health checks and health guidance, periodic health checks for schoolchildren and college students and health checks for the middle-aged and elderly (including health education, examinations, cancer tests and home visits) at the public expense. This is a program Japan can be proud of.

War on cancer

Cancer has been the leading cause of death in Japan since 1981. In 1986, cancer claimed 190,000 lives. Today, one in four Japanese can expect to die of the disease. Moreover, the number of cancer patients is half as large again as the number of fatalities, totaling some 290,000, or approximately 1.7% of all patients in Japan. It now costs some ¥1 trillion annually to fight cancer, a mammoth sum eating up 7.3% of all general health expenditures. With both patients and fatalities increasing year by year, the total number of patients is forecast to reach some 480,000 by 2000.

The war on cancer is now high on the government's policy agenda. There are already 10 national cancer centers, and 161 cancer screening centers. The governmental "10-Year Comprehensive Strategy against Cancer" was implemented in 1983. There are high hopes that this program will help find the long-sought cure to this dreaded disease. The government is committing ¥50 billion a year to fighting cancer, joined by another ¥2 billion-plus from the private sector. In all, cancer studies claim 15% of Japan's total research and development budget for health and medicine.

Another of Japan's great strengths is its ability to apply the striking progress in medical technology and information-processing technology to health care. Already a wide range of new patient services are coming into use. In 1987, public health centers, prefectural and city health care-related offices and the Ministry of Health and Welfare were linked by an on-line computer system to monitor the incidence of tuberculosis and other infectious diseases. It is now possible, for instance, to analyze the spread of influenza epidemics throughout Japan within a matter of days.

IC card systems for health certificates under the national health insurance program have been developed and are finding ever wider use, as are emergency medical information systems and systems for getting emergency medical aid to senior citizens who live alone. Such health care support systems are bringing about a transformation in the consciousness of both citizens and health care professionals.

Moreover, Japan has recently taken steps to establish a research organization devoted specifically to the science of longevity. With the graying of Japanese society, this body will carry out wide-ranging research on everything from the aging mechanism itself to the participation of senior citizens in society. Japan is thus taking the lead in finding ways to refine solutions to the problems of old age into a new kind of industrial technology, one that can contribute to the future development of the economy and society as a whole.

Today, nearing the end of the old century and on the verge of the new, many problems loom on the health care horizon. Yet there are also clear signs of progress in medical science and medical treatment, be it in the institution of health care for the whole person, the conquest of cancer and AIDS, or even space medicine. The coming years promise fresh challenges. But they also promise new rewards.

Nobuo Koinuma is deputy director of the Health Statistics Division of the Statistics & Information Department of the Ministry of Health and Welfare. He has written numerous books on medical and health-care problems.