

## **Chapter XIII**

# **Health**

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### I. INTRODUCTION

13.01 Health is an integral part of socio-economic development. It supports the Government's development efforts in attaining progressive improvements in the health status of the population and productivity of the workforce. During the Fifth Malaysia Plan, health sector programmes were expanded to provide support to the other sectors of the economy.

13.02 The overall thrust of the health sector development programmes during the Fifth Plan was the attainment of *Health For All by the year 2000*, aimed at achieving a standard of health that will enable Malaysians to enjoy a high quality of life. This implies a population capable of working productively and participating actively in the social life of the community in which they live. It also implies a longer expectation of life, a decreasing rate of infant mortality and a diminishing incidence of infectious diseases. Towards this end, the strategies and programmes undertaken included more equitable distribution of efficient health services and facilities, both in the urban and rural areas as well as effective collaboration between health and other health-related programmes.

### II. PROGRESS, 1986-90

13.03 Consistent with the need to attain better and more equitable distribution of health services and facilities in both the urban and rural areas, the Government undertook the construction of 33 hospitals, 170 health centres and 464 rural clinics as well as the upgrading of 94 health facilities during the Fifth Plan period. Of these facilities, 97 health centres, 187 rural clinics and two district hospitals were completed while other hospitals and major upgrading works were under various stages of construction. In spite of these additional facilities, the delivery of health

services was affected by the shortage of doctors and specialists in the public sector, especially in general and district hospitals. In addition, the over-concentration of private doctors and specialists in urban areas further affected the equitable distribution of health services in the country.

### **Preventive Health Services**

13.04 Various preventive and promotive health activities were implemented during the period. They included immunization and vaccination, control of communicable diseases, rural environmental sanitation, applied food and nutrition, occupational health and safety, health education, family development, anti-dadah and road safety programmes.

13.05 The effective implementation of preventive and promotive programmes depended largely on efficient inter-sectoral coordination and collaboration of the relevant agencies in the public and private sectors. Although efforts were made to bring about proper coordination among the relevant agencies in the public sector, the need for a national coordinating body was greatly felt in the implementation of health programmes. Efforts were also made to bring about inter-agency coordination, while studies were undertaken to organize and propose mechanisms for more effective inter-sectoral coordination.

13.06 The Government played a dominant role in the provision of preventive and promotive health programmes. Among these, the rural environmental and sanitation programme provided clean water supply and sanitation facilities for about 212,400 rural households, while the applied food and nutrition programme benefited about 78,000 families. The expanded programme of immunization provided extensive coverage, especially BCG 99.4 per cent, poliomyelitis 83.3 per cent, double and triple antigen 84.1 per cent and measles about 61 per cent of immunizable children in 1990. These had contributed to the reduction in the infant and toddler mortality rates from 16.9 and 1.4 per thousand in 1985 to 13.5 and 1.3 per thousand in 1989, respectively. Immunization for rubella was started in 1987 for eligible women aged 15 to 44 years, and that for hepatitis B, in 1989.

### **Curative Health Services**

13.07 Curative health services were expanded during the Fifth Plan period. The Government undertook the upgrading and renovation programmes for existing general and district hospitals which included

the General Hospitals of Ipoh, Johor Bahru, Kangar, Kuala Lumpur, Kuching, Melaka, Seremban and the District Hospitals of Sungai Petani and Taiping. Existing health centres and rural clinics located in various parts of the country were also upgraded and renovated, thus enabling the improvement of health services in the rural areas. In order to improve diagnostic capabilities, high technology facilities such as computerized tomography and other biomedical equipment, costing \$55 million, were acquired for general hospitals. The construction of a modern and sophisticated National Heart Institute, costing about \$155 million, was started in 1990 to cope with the increasing incidence of cardiovascular diseases. This Institute will be equipped to perform open-heart surgery and to treat various types of cardiovascular diseases.

13.08 The expansion of health services was given high priority with the provision of basic health care and specialist services in medicine, surgery, paediatrics, obstetrics and gynaecology. The facilities for such services were under construction in District Hospitals such as Kulim, Segamat, Batu Pahat and Kuala Pilah. In addition to the above, 97 health centres, 187 rural clinics and two district hospitals were also completed. Where accessibility was a problem, mobile health and flying doctor services were also provided to the interior and remote parts of the country.

13.09 The Government also introduced programmes to improve the quality and increase the utilization of facilities at health centres and district hospitals to ensure effective delivery of health services to the public. In this regard, refresher courses for the relevant personnel in the management of curative health services were also organized.

13.10 Dental services during the period comprised personal dental care and preventive care components. A total of 254 projects were under construction under the personal dental care programme comprising 22 main dental clinics in towns, one school dental centre, 135 school dental clinics, 86 mobile dental clinics, and ten periodontal units in hospitals. Besides these, personal dental care was also provided through rural health centres of which 170 were completed during the Plan period. At the end of 1990, one main dental clinic, 33 school dental clinics, 34 mobile dental clinics and five periodontal units in hospitals were completed.

13.11 Under the preventive dental services programme, the fluoridation of water supplies and dental health education were implemented. Twenty-eight fluoridation plants were under construction in the Fifth Plan of which 14 were completed. Five out of 28 dental health education units were also completed.

13.12 The pharmaceutical service is an important support service that ensures adequate supply of drugs through appropriate purchasing and local manufacture and the control of quality, efficacy and safety of drugs as well as proper procedures for the importation, management and sale of drugs and pharmaceutical products. During the Fifth Plan, various achievements in this field were made. They included the modernization of stores management and inventory control system at the central and state levels, upgrading of pharmacies in hospitals and the implementation of the integrated medical store system.

### **Manpower Development**

13.13 The delivery of efficient and quality health services depends on the supply of trained health manpower. During the Fifth Plan period, there were 4,229 doctors, 249 specialists and 10,500 nurses in Government medical institutions. Despite this, the public health services faced shortages of manpower which affected the delivery and scope of health services. Many trained personnel gradually retired or left the public service to join the private sector, thus creating 370 vacancies for doctors, 171 for specialists and 400 for nurses in 1990.

13.14 In 1990, the doctor-population ratio for the nation was 1:2,560, below the Fifth Plan target of 1:2,000. In terms of distribution by state, Wilayah Persekutuan Kuala Lumpur and Pulau Pinang had a doctor-population ratio above the Plan target, due to high concentration of doctors in the private sector in the two states. All other states had not achieved the Plan target, as shown in *Table 13-1*. In order to overcome the shortage and the inequitable distribution of doctors amongst states, the Government recruited foreign doctors on contract, increased the intake of medical students in local universities and utilized the services of retired health personnel, while trained and competent medical assistants and nurses were deployed to district hospitals and health centres. In addition, the terms and conditions of service for public sector doctors and specialists were improved. The Government also undertook to improve and increase in-service training for doctors who were then deployed to the various hospitals in the country. Other incentives were also provided, such as free institutional quarters for doctors on call duty, higher specialist allowances and greater post-graduate training opportunities for doctors in the various professional fields.

13.15 These measures coupled with the expansion of preventive and curative health care services and facilities, led to an improvement in health status, as shown in *Table 13-2*. The life expectancy for males improved from 67.9 years in 1985 to 69 years in 1989 while for the females

from 73 to 73.5 years during the same period. The maternal mortality rate was also reduced from 0.37 to 0.3 per thousand while the crude death rate was reduced from 5 to 4.7 per thousand.

### Medical Research and Development

13.16 The thrust in medical research and development (R&D) was primarily to conduct applied biomedical research aimed at improving the diagnosis, management and prevention of parasitic, infectious and non-communicable diseases as well as assisting the general and district hospitals in pathological services. Considerable advances were made in research on tropical diseases which contributed towards the prevention and treatment of malaria and dengue. Institutions of higher learning were also encouraged to undertake medical research as part of their science and technology development programmes.

TABLE 13-1  
DOCTOR-POPULATION RATIO BY STATE, 1985-90

<i>State</i>	<i>1985</i>	<i>1990</i>
Johor	1: 4,187	1: 3,145
Kedah	1: 5,516	1: 4,277
Kelantan	1: 6,898	1: 3,764
Melaka	1: 3,012	1: 2,648
Negeri Sembilan	1: 3,353	1: 2,617
Pahang	1: 4,583	1: 3,508
Perak	1: 3,544	1: 2,823
Perlis	1: 3,794	1: 3,400
Pulau Pinang	1: 1,925	1: 1,815
Sabah	1: 6,897	1: 5,082
Sarawak	1: 6,696	1: 5,175
Selangor	1: 3,335	1: 2,280
Terengganu	1: 5,555	1: 4,226
Wilayah Persekutuan Kuala Lumpur	1: 815	1: 721
<b>Malaysia</b>	<b>1: 3,175</b>	<b>1: 2,560</b>

TABLE 13-2  
SELECTED INDICATORS OF HEALTH STATUS AND HEALTH  
SERVICE FACILITIES<sup>1</sup>, 1980-90

<i>Indicator</i>	<i>1980</i>	<i>1985</i>	<i>1990<sup>2</sup></i>
Life Expectancy, in Years <sup>3</sup>			
Male	66.70	67.90	69.00
Female	71.60	73.00	73.50
Infant Mortality Rate (Per 1,000) <sup>3</sup>	19.70	16.95	13.50
Toddler Mortality Rate (Per 1,000) <sup>3</sup>	1.80	1.40	1.30
Maternal Mortality Rate (Per 1,000) <sup>3</sup>	0.60	0.37	0.30
Crude Birth Rate (Per 1,000)	30.90	31.70	27.10
Crude Death Rate (Per 1,000)	5.30	5.00	4.70
Doctors Per 10,000 Population	2.60	3.15	3.76
Dentists Per 10,000 Population	0.50	0.66	0.73
Acute Care Hospital Beds Per 1,000 Population <sup>4</sup>	1.70	1.70	1.50
Health Centres Per 100,000 Rural Population <sup>5</sup>	8.86	8.20	6.05

Notes:

- <sup>1</sup> The indicators took into account the usage of facilities by temporary immigrants.
- <sup>2</sup> Refers to 1989 figures.
- <sup>3</sup> For Peninsular Malaysia only.
- <sup>4</sup> Excluding special medical institutions and private hospitals.
- <sup>5</sup> The decreasing ratio from 1980 to 1990 is due to population increases and the expansion of outpatient facilities in the district hospitals.

### Private Sector Participation

13.17 The improvement in income levels and increasing demand for more services led to the expansion in the number of private hospitals and maternity and nursing homes from 119 in 1983 to 192 in 1990. Most of these private facilities were located in urban areas. In the public sector, the privatization of certain non-clinical services such as laundry, security and maintenance of facilities was undertaken in line with the Government's privatization policy. A feasibility study was undertaken to evaluate the viability of privatizing the management of the National Heart Institute which is under construction.

## **Management of Health Services**

13.18 Efforts were made to further improve the management of health services in order to effect greater quality and equity in the delivery of health services and the implementation of health and health-related development programmes. In view of population increases and changes in the population structure, additional and new demand continued to be made on the supply of quality and equitable health services. Towards this end, studies were implemented to improve resource mobilization and utilization as well as better coordination of health services development and operations.

13.19 Improvements were made to the billing system in general and district hospitals to ensure a more effective collection of user charges. A revised system of user charges was implemented to initiate nominal cost recovery in hospitals and clinics in the country. Computerization was introduced in order to create a more efficient billing system.

13.20 Several studies were conducted to improve the management, utilization, and coordination of health services. A feasibility study on the proposed National Health Security Fund (NHSF) was carried out in the Fifth Plan. The study proposed several organizational options for the NHSF. However, the viability of the proposed options needed to be further reviewed to clarify their financial, economic and social implications. A National Health Plan (NHP) study was undertaken in 1990 to identify and mobilize various health resources in the public and private sectors as well as their efficient and equitable distribution and development. The need for a national coordinating body became evident in the process of implementing health and health-related development programmes. The Government conducted a study on the establishment of a National Health Council as the coordinating body for the development of health and health-related programmes and services in the public and private sectors.

## **III. PROSPECTS, 1991-95**

13.21 The development of the health sector during the Sixth Malaysia Plan will continue to pursue the objective of attaining *Health For All by the year 2000*. The strategies will focus on efforts to further develop, strengthen and maintain an efficient and equitable health services system in order to have a healthy population. The system will also provide quality health care and greater accessibility of health services to the population. In this context, further strengthening of the services at the



district level will continue to be implemented. The ongoing NHP study will provide the basis for improving coordination in health development as well as management of the national health services and resources. Substantial Government allocation, amounting to \$2,253 million, will be provided under the Sixth Plan to undertake new as well as complete existing programmes and projects undertaken during the Fifth Plan.

### **Preventive Health Services**

13.22 Efficient preventive health programmes will continue to be undertaken during the period in order to reduce future expenditure on curative care. Occupational health and safety will be strengthened as an important component of the preventive health care programme. The ongoing study on occupational health and safety will assist in reviewing policies, regulations and guidelines, coordinating the related programmes as well as identifying further legislative requirements. An Institute for Occupational Health and Safety, costing \$15 million, will be constructed under the Sixth Plan.

13.23 The basic components of the environmental and sanitation programme will be expanded, particularly in the rural and squatter areas. Priority will be given to areas with a high prevalence of communicable diseases where potable water supply system is not available or affordable by the population groups concerned. A sum of \$63 million will be allocated to provide sanitation for 132,000 households and safe water supply for about 200,000 households.

13.24 Priority will be given to the continuation of the applied food and nutrition programme, directed towards the rural and urban poor. The Government will step up surveillance and enforcement on food quality control to ensure compliance with set standards. The local authorities will also continue to complement the efforts of the Ministry of Health. The Ministry will upgrade the Public Health Institute in Kuala Lumpur and its practical training centres in the various states. An allocation of \$10 million will be set aside for the training of health staff, such as medical officers of health and health inspectors.

13.25 The expanded programme of immunization against diseases, such as poliomyelitis, diphtheria, pertussis, tetanus and measles, will be continued with priority to improve the coverage, particularly in remote areas. Efforts will be made to achieve complete coverage in BCG immunization. It is envisaged that three million people will be immunized against rubella and hepatitis B during the Sixth Plan period.

13.26 A major health promotion programme to inculcate a healthy life style in the population will be launched during the Sixth Plan. This programme is designed to reduce the incidence of diseases of affluence, such as diabetes and hypertension. Besides this, improving personal hygiene and life styles through health education will be conducted by the health and health-related agencies as well as the mass media, such as Radio Television Malaysia and the Department of Information.

### **Curative Health Services**

13.27 The physical and non-physical facilities for primary, secondary and tertiary levels of health care will be further improved and expanded in the Sixth Plan. The Government has improved its referral system making it more efficient and effective to ensure that patients receive appropriate care based on need. Measures such as decentralized urban polyclinics and day-care services will be continued in order to maximize the utilization of facilities and services at various levels and to ease congestion, especially at general hospitals.

13.28 In consonance with the aim of more equitable distribution of services, the district health system will be strengthened with the provision of X-ray facilities and the upgrading of laboratory services in health centres and polyclinics. The on-going master plan for the upgrading and rehabilitation of 13 existing general and district hospitals as well as other minor upgrading will be formulated by 1992. A sum of \$704 million will be allocated for their construction which is expected to be completed by 1995. The upgrading and rehabilitation programme is in line with the Government's objective of providing basic specialist services in medicine, surgery, paediatrics, obstetrics and gynaecology at various selected district hospitals to meet the growing demand for such services. The expansion of basic specialist services will be supported by the supply of adequate trained manpower through post-graduate training.

13.29 Two of the new district hospitals at Yan and Jitra undertaken during the Fifth Plan are expected to be commissioned in 1991. In addition to upgrading, the construction of new curative facilities, such as the 32 district hospitals and the National Heart Institute, will be completed and commissioned before the end of the Sixth Plan period. An allocation of \$1,352 million will be set aside to cater for the construction and the purchase of equipment for such facilities. These facilities are expected to provide an additional 1,000 hospital beds by the end of the Sixth Plan period, including beds for open-heart surgery and treatment of cardiovascular diseases. Studies on the upgrading of National Blood Transfusion Services and Spinal Injury Treatment Services will also be completed during the period.

13.30 The construction of a new district hospital with basic specialist facilities in Labuan will be undertaken to support the development of Labuan as an International Offshore Financial Centre. In order to promote and enhance tourism, the Government has also approved the construction of new district hospitals and the upgrading of health facilities in Cameron Highlands, Pulau Langkawi, Port Dickson and Sri Manjung, costing \$153 million.

13.31 In the Sixth Plan, development of dental services will continue to aim at further raising the level of dental health of Malaysians through promotive, preventive, curative and rehabilitative measures. Personal dental care and preventive dental programmes undertaken during the Fifth Plan will be continued. Priority will be accorded to economically disadvantaged population groups to ensure an overall balanced provision of dental care in the country. In this context, efforts will be made to improve accessibility and quality of dental services, particularly in the rural areas. Priority will be given to upgrade the knowledge and professional skills of dental personnel and provide more dental specialist services. Priority will also be accorded to expand school dental health services.

13.32 In the Sixth Plan, quality control to ensure the efficacy and safety of drugs will be strengthened. Towards this end, the National Pharmaceutical Control Laboratory will be upgraded at a cost of \$13 million. Priority will also be given to improve storage capacity of medical stores to ensure an efficient drug supply system in the public sector. The pharmaceutical industry has vast potential for development as local manufacturers satisfy only about 25 per cent of the nation's needs. The Government will provide the necessary encouragement for the expansion of local pharmaceutical industry as well as encourage local entrepreneurs and foreign multi-nationals to set up more manufacturing facilities in Malaysia.

### **Manpower Development**

13.33 The Government has set a doctor-population ratio target of 1:1,500 for the year 2000 in order to provide a higher level of care to the population and efforts will be made towards achieving this target. During the Sixth Plan, the Government's training programme is expected to produce 2,000 doctors locally, while about 500 doctors are expected to return from overseas. In order to overcome the current shortage of doctors, retired doctors will continue to reemployed. The Government has approved the setting up of a teaching hospital in Cheras for *Universiti Kebangsaan Malaysia* and has commissioned a feasibility study on the

proposed establishment of a medical complex in *Universiti Islam Antarabangsa*, in order to increase the number of student intake into the faculties of medicine so as to increase the supply of doctors. In addition, the Government will continue to send an increasing number of students to study overseas, and more foreign doctors and specialists will be employed on a contract basis.

13.34 The training capacity in existing schools for nurses under the Ministry of Health will be expanded. During the Sixth Plan, about 5,295 nurses will be trained by the Government. The Government will also consider the possibility of recruiting foreign nurses to supplement local supply. The training of other para-medical personnel will involve about 800 laboratory technologists, 2,100 medical assistants, 250 occupational therapists, 630 pharmaceutical assistants, 250 physiotherapists and 520 public health inspectors. In view of the shortage of about 400 nurses in 1990 and further expansion of Government hospitals, the private sector will be encouraged to increase their training capacities to supplement the public sector efforts. Through contractual arrangements, the Government will continue to encourage private physicians and surgeons to work on a part-time basis and to utilize facilities available at general and district hospitals in order to alleviate the shortage of doctors in the public sector.

### **Medical Research and Development**

13.35 The Institute of Medical Research (IMR) will continue to undertake R&D with the objective of developing applied biomedical research and assisting the general and district hospitals in the country to provide more sophisticated pathological services. About \$17 million from the R&D fund for science and technology will be allocated to IMR to undertake innovative biomedical research on various aspects of health and health-related problems under the programme of Intensification of Research on Priority Areas (IRPA). Research on diseases of affluence and health problems related to food quality, tropical diseases, Acquired Immune Deficiency Syndrome (AIDS) and other viral diseases will also be undertaken.

13.36 Further research will be undertaken to facilitate the application of available technology to control food and water-borne diseases, nutritional deficiencies, inappropriate fertility and immunizable diseases. Research on non-communicable diseases caused by hazardous factors, such as smoking, alcohol and pollution, will also be expanded. The institutions of higher learning will also be required to cooperate and

coordinate their research under the IRPA programme. Overall a total of \$59.8 million will be provided for R&D activities in the medical and health fields.

### **Private Sector Participation**

13.37 The Government will continue to encourage the private sector to provide health services. However, the growth of the private sector health services has to be coordinated in order to supplement the Government efforts in meeting the demand for health services by the public as well as ensuring equitable distribution of such facilities. The Government will consider the recommendations of the Health Services Financing study to reorientate private medical practice to meet the country's need through an agreed code of conduct and practice so as to maintain a standard quality of services based on available facilities and affordability of the consumers. In situations where Government facilities are not available, the Government would use private facilities if they are found to be cost-effective. The Government will evaluate the viability of privatizing the management and operations of the National Heart Institute, without affecting the accessibility of Government employees and the low-income group to medical treatment. The Government will continue to support the setting up of private medical facilities, such as hospitals and clinics, to cater for those who can afford such services.

### **Management of Health Services**

13.38 The NHP study will be completed in 1992. NHP will include the framework for the mobilization and utilization of health resources in the public and private sectors, manpower development, distribution of health facilities and the upgrading and renovation of existing ones, incentives for private sector relocation to under-served areas and the coordination of the public and private sector programmes. A further review of the NHSF study will be undertaken to ascertain the advantages and disadvantages of the proposed scheme compared with the existing system of financing health care in Malaysia. It is also envisaged that a National Health Council will be established to coordinate policies and programmes in the health sector.

13.39 In order to facilitate an orderly development as well as to effect an equitable distribution of health services and facilities between urban and rural areas, a master plan indicating the nature and location of existing and required levels of health services and facilities for the entire country will be drawn up.

#### IV. ALLOCATION

13.40 The total development allocation for the health sector during the Sixth Malaysia Plan is about \$2,253 million, as shown in *Table 13-3*. This amount is 4.1 per cent of the total Federal Government development allocation for the Sixth Plan period compared to 2.6 per cent under the Fifth Plan.

#### V. CONCLUSION

13.41 The improvement of health services as well as the well-being of society will continue to be emphasized during the Sixth Plan period. The objective of health services will be to improve the quality of life of all Malaysians through the provision of equitable health and health-related services.

TABLE 13-3  
DEVELOPMENT ALLOCATION FOR HEALTH, 1986-95  
(\$ million)

<i>Programme</i>	<i>5MP</i>		<i>6MP</i>
	<i>Allocation</i>	<i>Expenditure</i>	<i>Allocation</i>
Patient Care Services			
New Hospitals	319	311	1,352
Upgrading & Renovation	383	371	594
Public Health Services			
Rural Health	191	181	160
Dental Services	6	6	7
Training	12	11	67
Other Health Services	33	31	39
Applied Food and Nutrition	21	10	22
Population	16	10	12
<b>Total</b>	<b>981</b>	<b>931</b>	<b>2,253</b>