

# **COUNTRY REPORT MALAYSIA**

**ENHR: AN ESSENTIAL LINK TO EQUITY IN DEVELOPMENT**

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## 1 Introduction

Health is an integral part of socioeconomic development of a country. Hence, investment in health is essential for the economic growth based on a productive workforce. To achieve this economic growth, it must be accompanied with more equitable access to the benefits of development (WHO, 1995).

Pursuing equity in development means trying to eliminate disparities in the well-being of the population that is all groups are brought up to a high standard (WHO,1995). In other words, pursuing equity is in sharing the progress. Thus, to reduce inequity involves first achieving minimum basic services for more and more people.

Equity in health is not only fairness but it is a social justice (Wagstaf A & Van Doorslaer E, 1993). Equity in health for the population involves equal access to available care for equal need, equal utilization for equal need and equal quality of care for all (Whitehead M, 1992).

Hence, equity is intricately linked to the determinants of health status and health care to the population. However, in assessing equity, the non-health factors such as income, education, literacy rate and housing should also be considered ( Whitehead M, 1992; Asian ENHR Groups, 1998).

Today, all countries have to make choices concerning health and health care. Priorities must be set which should be based on sound scientific evidence about the problems and their solutions. Hence, the Council for Health Research and Development (COHRED) Commission concluded that research is essential to improving health. Research is to support informed decision-making. This means that scientific evidence should be used to influence decisions when making explicit choices and priority setting in health sector to achieve equity in health (IRDC, April 1994).

## 2 Background

The task force on ENHR (Essential National Health Research) has developed strategies for countries to promote research unique to the culture and affordability of health systems within the countries. The Commission for Health Research and Development (COHRED) has defined competencies that are essential to make health research as an important link to equity in development within the participating countries (Lucas *et al.* 1992).

The Asian ENHR groups under the leadership of Prof. Dr. Chitr Sitthi-amorn from Chulalongkorn University, Thailand has submitted a proposal to conduct a multi-country study to assess equity in development: equity in health status, access to health care and change in lifestyle 10 years after the Commission Report within and between 10 Asian countries, with and without ENHR activities. The research looked into the degree of achievement in equity between these Asian countries. The concept of this collaborative research is to use the existing data from national and international sources to indicate change in equity over a 10-year period before and after the introduction of ENHR movement in one country. This would show the effects of health research as evidence to equity or inequity in the respective countries. The other output of the collaborative study is the presence of a consolidated regional database on indicators related to equity for the participating countries. This information could assist the health planners to develop future work plans related to equity at their country, regional or global levels.

### **3 Malaysia**

Equity in development has long been a fundamental issue in Malaysia. Since the nineteen sixties, the country's emphasis has been on improving the socio-economic condition of the population especially in rural areas. The National Economic Policy (NEP), in the seventies to 1990, had addressed restructuring of society based on equitable distribution of the nation's wealth. This social agenda has now continued in the National Development Policy (NDP). The government's commitment to strive for an economically just and equitable society is expressed as a pledge in our country's Vision 2020. This social equity has been a fundamental principle for the nation's growth from independence (Malaysia, 1971; 1991).

Concurrently, Malaysia was invited to collaborate in this multi-country study on Equity in Development as proposed by the Asian ENHR groups. This study was sponsored by COHRED. This effort will help guide the health planners to consider the basic tenets of equity in their work plans.

### **4 Objectives**

1. To study the change in equity of access to health care, health status, some non-health indicators, and lifestyles between population groups at 2 points in time namely around 1990 and 1997
2. To study the change in efficiency of achieving health status as defined by the relationship of the health expenditures and the mortality and life expectancy among various population groups
3. To study the changes in efficiency, affordability, quality and sustainability of the health care systems in Malaysia
4. To identify the current research in addressing equity either directly or indirectly
5. To identify relevant information for addressing the issues related to inequity in health within and outside the responsible agencies.

### **5 Methodology**

#### **5.1 Data Sources**

The following provides some background information regarding the sources of data for this project.

##### **5.1.1 Document reviews**

The indicators of the various aspects of equity were sought within the Ministry of Health Malaysia, published or unpublished reports. Two data points were ascertained i.e. around 1990 and 1997. This provided the percentage changes to the indicators of the various aspects of equity.

##### **5.1.2 Secondary data sources**

Specific surveys of internal documents both published and unpublished, in other related agencies were conducted to fill important gaps. Databases in the Department of Statistics, Economic Planning Unit in the Prime Minister's Department and the like were sought systematically.

### **5.1.2.1 Department of Statistics Malaysia (DOS)**

The DOS is a government department under the Prime Minister's Department of Malaysia. It is responsible for the collection of official statistics for the Malaysian government. The main functions of the Department are the collection, interpretation and dissemination of statistics for the purpose of formulating policies for national development planning and administration.

The DOS conducts various sample surveys and censuses. It has also conducted the Population and Housing Census for the years 1970, 1980 and 1991. The next population and housing census will be carried out in the year 2000. Publications for the surveys and censuses can be purchased from the Department located at Kuala Lumpur.

### **5.1.2.2 Economic Planning Unit**

The Economic Planning Unit of the Prime Minister's Department is the central planning agency of the Government, responsible for formulating policies and strategies for medium and long-term economic development with the overriding objective of achieving national unity

### **5.1.2.3 Information and Documentation System Unit of Ministry of Health Malaysia (IDS, MOH)**

This unit is a decision support system for health managers, especially in Ministry of Health, which links information to managerial concerns. One of its main functions is collection, compilation and documentation of data in Ministry of Health. Its task is in managing health information for effective planning, development, co-ordination and evaluation of the individual program in MOH

### **5.1.2.4 Community surveys**

Concern for knowledge on the extent of disparity in health status and an understanding on health seeking behavior in Malaysia had initiated the National Health and Morbidity Survey to be conducted in 1986 (NHMS1) and 1996 (NHMS2). Throughout this paper, results from these surveys are reported where applicable.

Both the NHMS1 and NHMS2 are community-based surveys, conducted 10 years apart. The NHMS1 was conducted for Peninsular Malaysia, leaving out the states of Sabah and Sarawak, which are situated in the island of Borneo. The NHMS2 canvassed samples throughout the whole nation. Both surveys used a multistage random cluster sampling design, the sampling frame consisting of the living quarters in Peninsular Malaysia for NHMS1 and the whole nation for NHMS2. For NHMS2, conducted in 1996, a total of 17,995 living quarters was selected, proportionate to population size. Prevalence of certain illnesses, health seeking behaviour and utilisation were studied.

## **5.2 Analysis**

Tables with the various indicators as required for this study were compiled from numerous sources. The percentage of change was then calculated using the formula below: -

$$\text{The percentage change} \\ (\% \text{ CHANGE}) = \frac{(\text{value for 1997}) - (\text{value for 1990})}{\text{value for 1990}}$$

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(value for 1990)

A descriptive analysis was conducted, as explained in the subsequent sections.

## **6 ENHR Indicators**

### **6.1 Health Indicators**

#### **6.1.1 Life Expectancy**

There had only been a slight increase in overall life and gender-specific life expectancy rates from 1990 to 1997. The percent change was observed to be more in males than females although the females had longer life expectancy.

#### **6.1.2 Mortality Rates**

Unlike life expectancy rates, there had been significant improvement in both infant, peri-natal and toddler mortality rates. As expected, maternal mortality rate had not changed, settling to a low 0.2 per 100,000. This rate was comparable to most of those from developed countries. The achievement as seen in the declining mortality rates described earlier reflected the significant impact of both structure and programs focussing on maternal and child health. Death under 50 years of age was also observed to decrease which implied an aging population in the future years.

#### **6.1.3 Morbidity Rates**

Incidence rates were calculated per 100,000 population. Over time, there had not been any reduction in the incidence of communicable diseases. In fact, the 1997 data has shown a slight increase in the incidence rates of TB possibly attributed to the increase in influx of immigrant workers into the country. These workers mostly originated from poor developing countries in the region. Nevertheless, the incidence of malaria has decreased markedly with better surveillance and prompt treatment. The markedly significant reduction in the incidence of dysentery might be attributed to improvement of water supply and basic hygiene.

Incidence of immunizable diseases had shown a general decreasing trend and there had not been a single case of polio since 1990. The success here might be attributed to the wide coverage of immunization and to a lesser extent improvements in the general environmental sanitation. The decline in Hepatitis B incidence may be attributed to the introduction of the National Hepatitis B immunization programme in 1989.

On the other hand, Malaysia's rapid economic growth resulting in fast paced development had resulted in increase incidence rates for non-communicable diseases such as cardiovascular diseases and nutrition. These may have been attributed to changes in lifestyle behavior. Except for hypertension incidence rate that showed a decline, incidence of cardiovascular disease rose by more than a 100%. Nutritional problems were reflected by increasing trends of obesity, protein malnutrition and by underweight births. In addition, the incidence of malignant cancer had been reported to rise in 1997 compared to 1990. The vector for dengue and dengue haemorrhagic fever

breed only in clear water and thus may be found mostly in housing estates and construction sites. There had been a markedly tremendous increase in the incidence rate of this disease over a span of 7 years. Work-related accidents and occupational injuries were also observed to have increased. No data could be obtained for disease related occupations in 1990 to enable comparisons to be made. Sexually transmitted diseases (syphilis and gonorrhoea) had shown a decline in incidence rates.

HIV/AIDS were not reported prior to 1986. However, since then there has been an alarming increase in incidence of both HIV infections and AIDS.

## **6.2 Health Sector Indicators**

### **6.2.1 Access, coverage and facilities**

This section covers issues pertaining to access to health facilities, coverage of some aspects of health care such as immunization, maternal and child health services, certain illnesses, acute and chronic, availability of facilities, and finance and human resource.

#### **6.2.1.1 Percentage access to health care**

There were no available figures for both the years 1990 and 1997. However, in 1996, 88.5% of the estimated population lived within 5 km<sup>1</sup> of a static health facility. Comparing urban and rural location, urban areas across all states had a higher percentage of respondents within 5 km of a static facility. Rural areas, especially in Sarawak, Sabah and Pahang were poorly served. In Peninsular Malaysia, 92.5% of the population lived within a 5-km radius from a static health facility (Maimunah *et al.*, 1999).

Malaysia had 81.1% of respondents (an estimated 13.9 million) living within 3 km<sup>2</sup> of a static health facility while in Peninsular Malaysia it was 85.9%. Urban areas for most states had more than 85% of respondents living within 3 km of a static facility, with the exception Sarawak. Rural areas had poorer coverage compared to urban areas (Maimunah *et al.*, 1999).

In 1986, NHMS1<sup>3</sup> (Pathmanathan & Lawson, 1987) found that for Peninsular Malaysia, 89% and 74% of respondents had lived within 5km and 3km of a static health facility respectively.

From 1986 to 1996, looking at Peninsular Malaysia alone, physical accessibility had improved, with 92.5% of the population now residing within 5 km of a static health facility, compared to only 89% in 1986. Similarly, the percentage has also increased for those residing within 3 km, from 74% to 85.9% (Sararak & Maimunah, 1997).

#### **6.2.1.2 Coverage rate of care**

Most of the coverage rates quoted here were from Ministry of Health (MOH) that is data captured from MOH facilities only throughout the nation and they excluded private sector provision of such services. This includes antenatal care and safe delivery of Maternal and Child Health (MCH) programs. However, with regards to immunization, especially immunization for childhood

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<sup>1</sup> Includes all respondents whose living quarters is 5km or less from the nearest static facility.

<sup>2</sup> Includes all respondents whose living quarters is 3km or less from the nearest static facility.

<sup>3</sup> Survey was only conducted in Peninsular Malaysia only. Sabah and Sarawak were excluded.

diseases, efforts were made at ground level to obtain information from private general practitioners in private sector and estate hospital care providers in order to compile as accurate as possible coverage rate for immunization.

On the whole, the coverage rates for immunization had improved marginally from 1990 to 1997. For measles, however, there had been a higher degree of positive change, most probably due to concerted efforts by the government to increase the coverage rate for measles.

There had been a drop in antenatal care, as measured by the first booking visit. This did not however reflect a drop in actual care for pregnant mothers in Malaysia, as the antenatal care provided by the private sector could not be captured in these figures. Hence, the drop seen most probably reflected a trend of increasing use of private facilities for antenatal care in recent years.

There had been an increase in the percentage of public facilities providing family health services, and a higher number of new acceptors and new active users of the family planning services. Rates of use or acceptors could not be reported, as there is no available data regarding the denominator, i.e. population (number) in childbearing age who could or would use such services.

Safe delivery of Maternal and Child Health (MCH) programme has also increased marginally. In 1997, 96.1% of deliveries in this country was considered safe, a percentage high for a developing country. In this indicator, safe deliveries are all deliveries conducted by trained medical personnel, both in the government as well as private sector. This included the following: -

- all deliveries in hospitals (government or private, including private maternity homes),
- deliveries in Alternative Birthing Centres (centres run by the government in rural remote areas) attended by a trained medical personnel, usually a midwife, staff nurse or community nurse, all of whom are trained in midwifery, and
- deliveries at home for pregnant mothers (who were deemed risk free during antenatal assessment, and hence may have home delivery should they wish for it), and attended by trained medical personnel<sup>4</sup>, almost always from central government health services.

All births attended by traditional birth attendants, born before arrival to a health facility, or born unattended are not considered as safe deliveries. The denominator for this indicator was the total deliveries for that year.

### **6.2.1.3 Facilities (public and private)**

The hospital/health facility to population ratio has dropped slightly and the number of acute beds per 100,000 population had actually dropped by 10.2%. The ratio of total beds to population in 1997 was 156 per 100,000 people in Malaysia.

The ratio of facilities providing primary health care<sup>5</sup> per 100,000 population had also increased slightly. This is due to both the efforts by the government to build more primary care facilities throughout the nation during the 6<sup>th</sup> and 7<sup>th</sup> Malaysia Plan (Malaysia, 1991; 1996), and to the economic boom that the nation experienced that lead to the mushrooming of general practitioner

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<sup>4</sup> Including the fact that the umbilical cord must be cut by the trained medical personnel

<sup>5</sup> Includes government health centres and private general practitioner clinics.



clinics throughout the nation. The NHMS2 had noted that in 1996, the commonest health facility nearest to the average person in the nation was the general practitioner clinic, both in urban as well as rural localities.

However, the number of facilities providing the various levels of medical care was not reported here due to ambiguity with regards to what type of facilities constituted primary, secondary or tertiary care. Instead, the various types of facilities and levels of hospitals were reported in section 2.9.1.

The community/village health center to population ratio had increased by 16.7% throughout the years. This is again through efforts by the government in building more rural clinics to serve population in rural and remote localities (Malaysia, 1991; 1996). In this instance, the facilities referred to are owned by the MOH. They are rural health centres manned either by community nurses (“*Jururawat Desa*”) or midwives, all government staff. Health centres manned by doctors had been categorized under primary health care facilities. There is no information available nationwide with regards to the number of clinics actually run by the community in Malaysia, though this was thought to be minimal given the extensive network on rural health centres already in existence.

## **6.2.2 Equity in Finance and human resource**

This section covers health care expenditure and human resource for health.

### **6.2.2.1 Finance by group**

#### ***Per capita health care expenditure spent by Ministry of Health (MOH)***

The MOH had been steadily increasing expenditures on health care for each individual in the country through the years as in the table [1990 – RM103.60 current prices; 1997 – RM175.00 current prices (RM129.73 in 1990 prices)] with a percent change of 25%. This was probably to meet the increasing demand for better care and to improve the access and quality of service provision.

#### ***Per capita health care expenditure as found in the NHMS2***

The survey revealed that the average per capita health care expenditure was RM180.00. In the urban area, it was found to be RM228.00 as compared to RM120.00 in rural area.

Individual out-of-pocket expenditures for health, hence, were fairly substantial. Not surprisingly, the urban population spent almost twice as much as the rural population out-of-pocket on health care. These expenditures were mainly for care in private facilities, which were more urban-based. The rural population utilised more health services from the government sector, which is highly subsidised.

Based on the figures in both subsections above, little could be concluded in terms of equitable financing for health care. This was because expenditures, whether by the urban or rural community,

must be correlated with actual utilisation patterns and subsidies provided by the government at public facilities. At least, it could be said that during the period of study, the MOH has in fact increased per capita health expenditures by 25 percentage points or RM26.13 in real terms.

### **6.2.2.2 Human resource for Health by geographical locations**

There was a tremendous increase in the overall physician population ratio. However, the increase had been notably in the public rather than private sector, though the actual percentage of physicians in the private sector nearly equals that of the public sector. Arguably, the public sector provides almost two thirds of health services in the nation.

With regard to registered nurses<sup>6</sup>, the nurse population ratio had almost doubled, and the distribution of nurses had increased for the private sector. However, the reader should be cautioned here that the public sector nurses included only MOH nurses, as there was no available data for nurses in other ministries in the government service. This number was expected to be very small, with most of them attached to non-MOH government hospitals, as the proportion of non-MOH hospitals was small (5% of government hospitals).

The ratio of pharmacists to population had also increased slightly, and there were slightly more pharmacists in the private sector now than in the past. This could be attributed to the growth in the private pharmaceutical industries during the economic boom of the 1990s. Self-medication is quite common in 1996, with half of those who had not sought care for their recent illness/injury<sup>7</sup> self-medicated (Maimunah *et al.*, 1999).

With regards to midwives and community nurses (“*Jururawat Desa*”), until recently there was no available data on the numbers in the private sector. In 1997, however, 0.9% of them were in the private sector. Similarly so for assistant nurses, though the percentage of them in private sector was much higher, at 15.8%. This phenomenon was again probably due to the increase of private health facilities in the nation in recent years.

For both dental nurses and medical assistants, no figures were available for the private sector, though there has been an increase in absolute numbers of these categories in the public sector.

## **6.3 Non-health Sector Indicators**

### **6.3.1 Population**

The population of Malaysia was found to be 18,102,400 in 1990. This figure rose to 21,665,500 in 1997. The annual rate of increase had been on the decline from 2.5% in 1990 to 2.3% in 1997. The country's population was evenly distributed between the urban and rural areas with a slight majority staying in the urban areas.

The percentage of poor households in the country has been reduced from 17.1% in 1990 to 6.8% in 1997. This could be attributed to the successful efforts by the government in reducing the number of poor households. The majority of the poor households were found in the rural areas.

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<sup>6</sup> Refers to SRN nurses (State Registered Nurses), nurses trained for three years at diploma level.

<sup>7</sup> Refers to illness or injury sustained over a two-week recall period.

The literacy rate for the whole country was found to be 72% in 1980 and 85% in 1991. The urban population had a higher literacy rate as compared to the rural population

### **6.3.2 Household**

The average household size had been on the decline. There were 5.2 persons per household in 1980 which dropped to 4.8 persons in 1991. There is not much difference in the household size between the urban and rural households. The average household size was found to be 4.4 persons in the 1998 Household Expenditure Survey conducted by the DOS.

The number of people without housing is negligible as compared with those with housing. For the other facilities such as sanitation, electricity and pipe water, the number of households provided with such facilities has increased by a large percentage between 1980 and 1991.

## **6.4 Lifestyle Indicators**

The prevalence of self-reported smokers in the last 10 years was observed to increase by 15.3% in the period between 1990 and 1997 (NHMS1 and NHMS2 respectively) (Haniza & Suraya, 1997). Although the Ministry of Health and other Non-government organizations have put efforts on the prevention and control of smoking through campaigns and health education programs, these efforts should be intensified. However, this prevalence had been found similar to other developed countries such as New Zealand (23%), USA (22.4%) and Singapore (17.4%) (WHO, 1997).

Between gender, the prevalence of current smokers in males was much higher than females (49.2% and 3.5% respectively) (Haniza & Suraya, 1997). The prevalence of women who smoked had not changed either in the same period (3.5% in 1990 and 4.0% in 1997). This was true in many Asian countries where smoking among females is not an accepted norm (Tessier *et al.*, 1992; Hashami *et al.*, 1994).

On the other hand, the prevalence of current drinkers was found to be 23% among the non-Muslims whose age was 18 years and above. This was obtained from the NMHS2 that surveyed only the non-Muslims. Since Malaysia is a declared Muslim country, due to the sensitivity of this question, it was posed only to the non-Muslims in the community. Unfortunately, there was no comparative figure for 1990. From this survey, the rural population (27.3%) reported higher prevalence of current drinkers as compared to the urban (21.1%). The males (38.3%) also reported higher prevalence than the females (9.8%) (Loe & Maimunah, 1997). The pattern of these findings ascribed to the culture and social acceptability of alcohol drinking in the Malaysian community among the non-Muslims.

## **6.5 Human Development**

For the Human Development Index (HDI) in Malaysia, in 1990, it was valued at 0.718, ranking 56 in number while in 1995, it was valued at 0.834, ranking number 60<sup>th</sup>. The percent change was 16%.

It should be noted here that the HDI is a composite of 3 basic components of human development:

- Longevity measured by life expectancy,
- Knowledge measured by a combination of adult literacy and mean years of schooling, and
- Standard of living measured by purchasing power based on real per capita GDP adjusted for

the local cost of living.

The methodology to calculate the HDI was changed in 1997. Therefore, the 1997 HDI value is not comparable with values of previous years. Disaggregated values were also not available.

The HDI value had increased over the 6-year period noted. But Malaysia's position in overall ranking had actually reduced. This suggests that while Malaysia has improved in terms of HDI value during that period, there have been other countries that have improved at a greater rate than Malaysia.

As disaggregated HDI values were not available, it is not possible to conclude on the issue of equity in terms of human development.

## **6.6 Efficiency Indicators**

The World Bank in the World Development Report 1993 estimated health expenditures for Malaysia to be 3.0% of GDP in 1990 while the study conducted by Rozita HH & Soe NU, estimated out-of-pocket health expenditure in Malaysia was 3.73% of GDP.

As Malaysia does not as yet have a systematic mechanism such as a National Health Account to monitor total health expenditures in the country, such values are estimated from various studies and research done ad hoc. From the 2 studies cited, it was clear that overall expenditure for health care was rising. It had increased by a 24 percent point change over the 6 year period of comparison.

Expenditure on health expressed as a percentage of GDP spent on health in 1990 and 1997 was found to be 1.1% and 1.2% of GDP respectively, with 9.1% percent point change.

In absolute amounts, this would be RM1316million and RM3255million in current prices respectively (or RM2413million in 1990RM). This showed percent change of 83%.

Even just looking at the budget of the Ministry of Health, it is clear that expenditures for health care were rising. This was more obvious in absolute amounts as the country's GDP during this period was also rising rapidly.

As for percentage of GDP spent by the people through out-of-pocket payment, the Health Services Financing Study, in 1984/85, conducted by the Economic Planning Unit, Prime Minister's Department estimated it was 0.5% of GDP. However, the NHMS2 in 1996, conducted by Public Health Institute, MOH estimated that it was 1.5% of GDP. The percentage point change was 200%. As in absolute amounts, the out of pocket payment was estimated at RM343million and RM3820million in current prices respectively (RM2608million in 1983RM) by the above 2 studies. This showed a percent change of 660%.

The largest rise in health care expenditures over the past decade has been in out-of-pocket direct payments by the consumers themselves. This reflects the increased demand for health care by the consumer. This was probably due to the rapid growth of the private sector and the fact that Malaysia did not have any extra-budgetary funding mechanism for health care such as social insurance. Private health care insurance is currently still small and the bulk of these out-of-pocket expenditures are mainly to private health care providers as the public sector is heavily subsidised and user charges are extremely small.

It is not clear that the indicators used for the analyses truly measure efficiency of the system as they are global figures that do not measure outputs on a per unit basis. Therefore, the increase in expenditures seen may just reflect an overall increase in the provision of health care in terms of increased facilities, utilisation, complexity of care etc. As the indicator collected did not measure a single quantum of service provided, no conclusion could be made on efficiency of the system.

## **6.7 Affordability Indicators**

### **6.7.1 Subsidy**

From the figures in the tables, it is obvious that the health services provided in the public sector are highly subsidised for all who use them. But in terms of value to the public, the subsidies given are more substantial for the poor compared to the rich, as their income is naturally smaller. For Outpatient Care, the subsidy received by the poorest quintile amounts to 3-16% of their income while the richest quintile, the subsidy received amounts to only 0.1-1.4% of their income; and for Inpatient Care, the poorest quintile received subsidy amounting to 41% of their income while the richest quintile received subsidy amounting to only 4.9% of their income (*Rozita et al., 1998*), Thus, the subsidies given to the poor in seeking care in MOH facilities are indeed significant in alleviating their financial risk of illness.

### **6.7.2 Fees-for-services**

As mentioned previously, health care costs in government facilities are highly subsidised and the user fee instituted are very small. Therefore, the average prices faced by those who utilise MOH services were very low, especially compared to prices paid out-of-pocket to private health care providers (*Rozita et al., 1998*)

### **6.7.3 Percentage of expenditure on health vs. household expenditure**

As seen from the table, household expenditures on healthcare has increased over the study period. This is to be expected as per capita GDP increases, the population becomes more educated and increase their demand for more health care. Also with more higher tech high cost care, this proportion of household expenditure on health care will increase further in the future.

As the case for the efficiency indicators in section VI, the indicators chosen for this section of affordability indicators, are very broad and may not be able to reflect a good measure for affordability of health care. To measure affordability, it may be a more relevant to use other indicators such as the average price of health care utilisation (total, outpatient and inpatient) as a percentage of per capita household income over the same duration. Another standard measure of affordability and financial risks in health care is to measure what proportion of the population and various sub-population groups experience major financial risks in health care (defined as expenditures greater than 10% of per capita household income).

## **6.8 Sustainability indicators**

### **6.8.1 Number of health facilities belonging to government/private**

The number of government hospitals has increased by almost one quarter, while non-MOH

government hospitals, such as university hospitals, military hospitals and aborigines hospitals has also increased by one fifth. Throughout the 6<sup>th</sup> and 7<sup>th</sup> Malaysia Plan (Malaysia, 1991; 1996) the government had put emphasis in building new hospitals to cater to the increasing population.

Private sector hospitals have also increased in number over the comparison period, with the percentage change of slightly more than one quarter. Other hospitals such as estate / mines hospital has dropped in number. Ongoing steps are being taken to improve the services in this hospital and this may include its absorption into the MOH infrastructure in the future.

In 1996, the average distances of a government and private hospital from the population were 17.0 km and 92.6 km respectively (Sararaks & Maimunah, 1997; Maimunah *et al.*, 1999).

### **6.8.2 Use of health facilities by population groups for outpatient care**

The total attendance for outpatient care had increased by 8.6%. However, these are absolute numbers of attendance.

Unfortunately, there is still no mechanism for the collection of information from health programmes/facilities run by local governments. However, in terms of provision of health services to the population in the form of outpatient clinics, only the local government of Federal Territory of Kuala Lumpur has this service. Although three other cities in Malaysia<sup>8</sup> do have health programmes such as vector control and so forth, they do not run clinics or hospitals for the population. Hence, reported here are the figures only for Federal Territory of Kuala Lumpur.

There appeared to be a drop in total attendance to local government clinics, by almost one quarter. This could be attributable to the sharp increase in general private practitioner clinics which occurred more so in cities such as Kuala Lumpur where the local government clinics were situated. Alternatively, there could have been a shift of preference by the consumers, not only to private facilities, but also to central government health facilities that are located in relatively close proximity. In addition, there is also the General Hospital of Kuala Lumpur that also runs outpatient services, and this hospital is actually run by the central government that has an established referral system.

The figures reported were in terms of total attendance, as there was difficulty defining the denominator. Malaysians were free to choose which health facility of provider they want to patronise, and as such, no adequate division of the population was possible to identify the denominator for this section. The NHMS2 had found out that the proportion of people who had sought government facility for acute care was much smaller than the proportion who had used government facilities for care of chronic illnesses (Sararaks & Maimunah, 1997; Rugayah, 1997; Rozita, 1997).

In terms of utilization rates, amongst those who reported recent illness/injury<sup>9</sup> and had visited a facility, more than half had used a private clinic, while slightly less than one fifth had used a government clinic. In NHMS2, the vast majority (87.8%) of those who had used a facility in this survey paid only one visit to the place, with only 9.2% reporting two visits (Sararaks &

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<sup>8</sup> The cities of Johore Baharu, Ipoh and Kuching

<sup>9</sup> Refers to illness or injury sustained over a two-week recall period. NHMS2 data.

Maimunah, 1997; Maimunah *et al.*, 1999). However, no information was available for the comparison year of 1990.

There was data available in 1986, in the NHMS1, in which utilisation were reported in terms of number of visits to a facility. Private clinics were reported to have the highest number of visits (127.4 visits per 100 persons), followed by government rural clinics (65.0 visits per 100 persons) and government hospitals (46.8 visits per 100 persons). Traditional practitioners were minimally used then (10.4 visits per 100 persons) (Pathmanathan & Lawson, 1987). Hence, in 1986, use of private clinics were double that of government clinics, and the use of private clinics seem to have increased since then, as shown in the NHMS2 findings.

### **6.8.3 Use of health facilities by population groups for in-patient care**

There was an almost 20% increase in use of facilities for inpatient care, as seen from the figures obtained from MOH data as compared to more than 90% increase in private inpatient care.

However, looking at the prevalence rates from NHMS2, government hospitals still garner most of the inpatient care in the country. Approximately 80% of hospital admissions in the country occurred in government hospitals in 1996 (Sararaks & Maimunah, 1997; Maimunah *et al.*, 1999). In contrast, in 1986, the NHMS1 reported that 85% of all hospitalisation episodes for Peninsular Malaysia occurred in government hospitals. Hence there appears to be an increase in use of private hospitals for inpatient care.

## **7 Conclusion**

The findings of this study provided some insight into the equity status of Malaysia in its development over the 10-year period namely 1990 to 1997. The population growth rate had decline and the average household size had also decreased. The percentage of poor households, which were mainly in rural areas had also decline remarkably. Household with basic amenities had increased tremendously. Similarly, with the literacy rate.

The health status of the population was seen to be improving with the increase in life expectancy, reduction of mortality rates among infants and those below 50 years old. However, we saw changes in the pattern of diseases over this 10-year period namely from high rates in infectious disease (except TB, HIV/AIDs and dengue) to high rates in non-infectious disease for example cardiovascular disease. This reflected a change in the lifestyle especially more people were smoking, consume alcohol (among the non-Muslims) and had malnutrition (towards a higher rate of obese in the population).

The study findings also revealed that percentage of the population who are accessible to the health care facilities (within 5km radius) had increased. However, the rural area still had poorer coverage as compared to the urban areas although the ratio of the government community clinics (manned by the community nurses and which were mainly in rural areas) to the population had increased by 16.7%.

Although we saw a marginal increase in the coverage of care for maternal and child over the last 10 years, the coverage remained high that is more than 90%. Primary health-care facilities either government or private in urban and rural areas had also increased. With regards to human resource

for health, the physicians and the nurses had increased tremendously but the absolute numbers were also seen to be increasing in the private sector. Little could be said about equity in financing for health in Malaysia. There was an increase in the per capita health care expenditure on health care for MOH within the last 10 years. It was also observed that average per capita out-of-pocket health care expenditure was more in urban than rural areas. In broad terms, it could be said that Malaysia was efficient in achieving health status as defined by the relationship of small increase in per capita health care expenditure in relation to long life expectancy and reduced some mortality rates despite the evidence of rising health care. However, more information on the subgroup populations is required to analyze as who benefit the most from the budget and services provided.

It could be said that Malaysia has an affordable health care system as evidence from this study finding. The poor were subsidized more than the rich were. As far sustainability is concerned, the indicators showed that there was high utilization rate of inpatient and outpatient care in both public sector and private sector although the percent change in the utilization of private sector seemed to be increasing.

Despite the above findings, this study revealed that there are still important gaps, either in information or research for assessing equity in development in Malaysia. Recent thinking has brought health to the center of the development by asserting poor health is a component rather than a consequence of poverty. Inequity in health, then, refers to the relative health status: between the rich and the poor, men and women, ethnic groups and regions (Feachem, WHO Bulletin 2000). Hence, the relevant authorities should identify key indicators if Malaysia is concerned to monitor its development in relation to equity issues.



## References

- Asian ENHR Groups. 1998. ENHR: An essential link to equity in development, 1998. (unpublished).
- Feachem R.G.A. 2000. Poverty and inequity: a proper focus for the new century. *World Health Organisation Bulletin*; 78 (1): 1
- Haniza MA & Suraya A. 1997. *Smoking among adults*. In Report of the Second National Health & Morbidity Survey Conference, 20-22 November 1997, Hospital Kuala Lumpur. . Kuala Lumpur: Public Health Institute, Ministry of Health Malaysia.
- Hashami B, Abdul Halim O, Yusoff K. 1994. Smoking among university students: a comparative study between Malaysian students in Malaysia and Australia. *Med J Malaysia* 1994; **49**(2): 149-57.
- Loe YK & Maimunah AH. 1997. *Alcohol consumption among non-Muslim adults*. In Report of the Second National Health & Morbidity Survey Conference, 20-22 November 1997, Hospital Kuala Lumpur. . Kuala Lumpur: Public Health Institute, Ministry of Health Malaysia.
- Lucas A. O., Michaud C., Malina D., *et al.* 1992. Essential National Health Research (ENHR): A strategy for action in health and human development, Geneva: ENHR Task Force.
- Malaysia. 1971. The first outline perspective plan 1971-1990. Kuala Lumpur National Printing Press.
- Malaysia. 1991. Sixth Malaysia Plan. Kuala Lumpur: Government of Malaysia, National Printing Press.
- Malaysia. 1991. The first outline perspective plan 1991-2000. Kuala Lumpur. National Printing Press.
- Malaysia. 1996. Seventh Malaysia Plan. Kuala Lumpur: Government of Malaysia, National Printing Press.
- Pathmanathan I. & Lawson J. 1987. *National Health and Morbidity Survey 1986-1987. Volume II: Morbidity and Utilization of Services*. Kuala Lumpur: Public Health Institute, Ministry of Health Malaysia.
- Rozita HH, Prescott N.M., *et al.* 1998. Managing Financial Risks for Health: Findings from NHMS2, Ministry of Health, Malaysia, September.
- Rozita HTH. 1997. *Hypertension among adults aged 30 years and above*. In Report of the Second National Health & Morbidity Survey Conference, 20-22 November 1997, Hospital Kuala Lumpur. . Kuala Lumpur: Public Health Institute, Ministry of Health Malaysia.
- Rozita HH & Soe NU. Estimated out-of-pocket health expenditure in Malaysia in 1996. Eighth Annual Public Health Forum “Reforming Health Sectors”, London School of Hygiene and Tropical Medicine, April 1998
- Rugayah B. 1997. *Diabetes Mellitus among adults aged 30 years and above*. In Report of the

- Second National Health & Morbidity Survey Conference, 20-22 November 1997, Hospital Kuala Lumpur. . Kuala Lumpur: Public Health Institute, Ministry of Health Malaysia.
- Sararaks S & Maimunah AH. 1997. *Recent illness/injury and Health Seeking Behaviour*. In Report of the Second National Health & Morbidity Survey Conference, 20-22 November 1997, Hospital Kuala Lumpur. . Kuala Lumpur: Public Health Institute, Ministry of Health Malaysia.
- Tessier JF, Freor P, Belougne D *et al.* 1992. Smoking habits and attitudes of medical students towards smoking and antismoking campaigns in nine Asian Countries, *Int J Epi.* 1992; **21**:298-303.
- Wagstaf A & Van Doorslaer E. 1993. Equity in the finance and delivery of health care: concepts and definitions. In: *Equity in the finance and delivery of Health Care: An international Perspective*. Oxford University Press.
- Whitehead M. 1992. The concepts and principles of equity and health. *International Journal of Health Services*; **22**(3):429-445.
- World Health Organisation. 1996. *Equity in Health and Health Care: a WHO/SIDA initiative*. Geneva: World Health Organisation. 1996
- World Health Organisation. 1997. *Tobacco or health: a global status report. Country profiles by regions, 1997*. <http://www.cdc.gov/nccdphp/osh/who/whofirst.html>.

**Malaysia**  
**ENHR: AN ESSENTIAL LINK TO EQUITY IN DEVELOPMENT**  
**ENHR Indicators (National figures)**

INDICATOR	YEAR		% CHANGE <sup>3</sup>
	1990	1997	
<b>I Health Indicators :</b>			
1 Life Expectancy <sup>1</sup>			
- Life expectancy at birth, Total	71.5	72.0	0.7%
- Life expectancy at birth, Male	69.0	69.6	0.9%
- Life expectancy at birth, Female	74.0	74.5	0.7%
2 Mortality Rates <sup>1</sup>			
- Infant mortality rate	13.1	9.5	-27.5%
- Maternal mortality rate	0.2	0.2	0.0%
- Under 5 mortality rate (Toddler Mortality)	1.0	0.7	-30.0%
- Perinatal mortality rate	13.4	9.1	-32.1%
3 Death under 50 as % of total <sup>1</sup>	30.8	29.5	-4.2%
4 Disease specific morbidity rate <sup>2</sup> (Incidence rate per 100,000 population)			
- Ischaemic (coronary) heart disease	124.8	158.6	27.1%
- Cardiovascular disease	415.2	882.1	112.5%
- Hypertension	151.3	138.1	-8.7%
- Acute respiratory infection	103.5	105.6	2.0%
- Pneumonia	112.0	113.4	1.3%
- Tuberculosis	61.2	62.5	2.1%
- COPD	NA	0.56	
- Diarrhoea (including dysentery)	3.1	0.4	-87.1%
- Hepatitis B	NA	1.42	
- Viral Hepatitis	8.01	NA	
- AIDS	0.08	2.38	2875.0%
- HIV	70	390	457.1%
- STDs			
- Syphilis	8.04	6.08	-24.4%
- Gonorrhoea	16.37	6.43	-60.7%
- Malaria	284.3	123.0	-56.7%
- Dengue-hemorrhagic fever	1.29	3.63	181.4%
- Prematurity	NA	NA	
- Cancer (Malignant)	151.1	172.6	14.2%
- Immunisable disease			
- whooping cough	0.13	0.01	-92.3%
- tetanus	0.11	0.06	-45.5%
- measles	3.17	2.61	-17.7%
- polio myelitis	NA	NA	
- diphtheria	0.1	0.0	-100%

Source: 1. Department of Statistics Malaysia (DOS)  
2. Information and Documentation System Unit (IDS), Ministry of Health Malaysia

Formula: For calculating % change  $\frac{1997-1990}{1990} \times 100\%$

Note: Special Keys Used:

- NA: Not Available
- Figures in **Bold and Italic** : NHMS2 1996
- Figures in **Bold**: Only for Peninsular Malaysia
- COPD: Chronic Obstructive Pulmonary Disease
- HIV/AIDS: Human Immunodeficiency Virus/ Acute Immune Deficiency Syndrome
- STDs : Sexually Transmitted Diseases

## ENHR Indicators

INDICATOR	YEAR		%
	1990	1997	CHANGE
- Accident and occupational injuries Work related <sup>1</sup>	121104	86589	-28.5%
Non-work related	NA	NA	
- Occupational disease <sup>1</sup>	NA	832.0	
- Total workers <sup>1</sup>	4,579,843	8,252,680	80.2%
<b>5 Nutrition</b>			
- Obesity <sup>*2</sup>	NA	<b>4.4%</b>	
- Under weight birth (% of live birth with birth weight under 2.5 kg)	<b>8.2</b>	<b>9.2</b>	<b>12.2%</b>
- Protein malnutrition <sup>3</sup>	25.0	18.7	-25.2%
- Micronutrient malnutrition			
Iodine	NA	NA	
Vitamin A	NA	NA	
<b>II Health Sector Indicators</b>			
<b>1 Access, coverage and facilities</b>			
<b>1.1 % with access to health care <sup>4</sup></b>			
- In Peninsular Malaysia			
- within 5 km	<b>89.0</b>	<b>92.5</b>	<b>3.9%</b>
- within 3 km	<b>74.0</b>	<b>85.9</b>	<b>16.1%</b>
- In Malaysia			
- within 5 km	NA	<b>88.5</b>	
- within 3 km	NA	<b>81.1</b>	
<b>1.2 Coverage rate of some care <sup>5</sup></b>			
- Immunisation (coverage rate %)			
BCG (Infants)	97.0	98.3	1.3%
DPT3	89.9	95.4	6.1%
OPV3 (Infants)	89.6	93.7	4.6%
Measles (Infants)	70.1	86.4	23.3%
Tetanus toxiod 2 (Antenatal mothers)	81.7	83.4	2.1%
Tuberculosis (Infants)	97.0	98.3	1.3%
Hepatitis B (Infants)	86.2	91.0	5.6%
- Antenatal care (mother's 1st visit)	78.1	68.8	-11.9%
- Family planning			
- % public health facilities providing integrated Family Planning Services	87.0	99.0	13.8%

Source: 1. Social Security Organisation of Malaysia (SOCSO)

2. Figure are for 1996 from the National Health and Morbidity Survey2 (NHMS2)

3. Dr. Safiah Yusof, Family Health Division, Ministry of Health Malaysia

4. Figure are actually for 1986 (NHMS1) only for Peninsular Malaysia

5. Information and Documentation System Unit (IDS), Ministry of Health Malaysia

Note: Special Keys Used:

- NA: Not Available

- Figures in **Bold and Italic**: NHMS2 1996

- Figures in **Bold**: Only for Peninsular Malaysia

BCG : Bacillus Calmette Guerin

DPT3: Third dose of vaccine for Diphtheria, Pertussis, Tetanus

OPV3: Third dose of vaccine for Oral Polio Vaccine

MCH: Maternal & Child Health Programme

BMI: Body Mass Index

\* NHMS 2 figures 1996, Prevalence rate of obesity grade 2 (BMI > 30 kg/m<sup>2</sup>) for Malaysian population

## ENHR Indicators

INDICATOR	YEAR		% CHANGE
	1990	1997	
- New acceptors	41230	54262	31.6%
- New active users	140918	199611	41.7%
- Delivery of MCH program (%)	92.9	96.1	3.4%
1.3 Facilities (public & private) per100,000 population <sup>1</sup>			
- Hospital or health facilities	1.60	1.58	-1.3%
- acute bed per 100,000 population	128	115	-10.2%
- total bed per 100,000 population	NA	156	
- Primary health care	3.8	4.0	5.3%
- Community or village health center (rural clinic)	18.0	21.0	16.7%
2 Equity in finance and human resources			
2.1 Finance by group			
- Per capita health care expenditure(MOH) <sup>2</sup>	RM103.60	RM129.73 *	25.0%
- Per capita out-of-pocket health care expenditure(NHMS2) <sup>3</sup>	NA	RM180.00	
- Per capita subsidy for special facilities	NA	NA	
- Per capita subsidy to service e.g. immunization, ANC, MCH, FP and emergency care	NA	NA	
- Per capita expenditure by social insurance	NA	NA	
- Per capita expenditure by voluntary insurance groups	NA	NA	
2.2 Human Resource for Health per100,000 population by geographic locations <sup>1</sup>			
- Physicians (per 100,000 population)	39.5	69.3	75.4%
% physicians in private sector	56.9	42.2	-25.8%
% physicians in public sector	43.1	57.8	34.1%
% physicians in dual sector	NA	NA	
- Nurses (per 100,000 population)	65.1	113.3	74.0%
% nurses in private sector	13.7	25.3	84.7%
% nurses in public sector	86.3	74.7	-13.4%
% nurses in dual sector	NA	NA	
- Pharmacist (per 100,000 population)	7.0	8.1	15.7%
% Pharmacist in private sector	67.8	77.1	13.7%
% Pharmacist in public sector	32.2	22.9	-28.9%
% Pharmacist in dual sector	NA	NA	

Source: 1. Information and Documentation System Unit (IDS), Ministry of Health Malaysia  
 2. Ministry of Health Malaysia, 1990 & 1997 Annual Report  
 3. National Health And Morbidity Survey 2 (NHMS2) data

Note: Special Keys Used:

- NA: Not Available
- Figures in **Bold and Italic** : data NHMS2 1996
- Figures in **Bold**: Only for Peninsular Malaysia

\* Prices at 1990

ANC: Antenatal Care

FP : Family Planning

MCH: Maternal & Child Health Programme

## ENHR Indicators

INDICATOR	YEAR		% CHANGE
	1990	1997	
- Midwife/Jururawat Desa			
Number in private sector	NA	50	
Number in public sector	5492	5827	6.1%
- Assistant Nurse			
Number in private sector	NA	1641	
Number in public sector	9378	8738	-6.8%
- Dental Nurse			
Number in private sector	NA	NA	
Number in public sector	1091	1388	27.2%
- Medical Assistant			
Number in private sector	NA	NA	
Number in public sector	3342	4966	48.6%
% nurse practioners in dual sector	NA	NA	
- Health manpower to population ratio in 1997 between private and public sector	NA	NA	
<b>III Non-Health Sector Indicators</b>			
1 Population <sup>1</sup>			
- Growth rate	2.5	2.3	-8.0%
- % Urban population	51.1	56.5	10.6%
- Literacy rate	72.0*	85.0**	18.1%
- % of people who finish compulsory education	NA	NA	
- % of people over poverty line	82.9	93.2	12.4%
- % of people under poverty line	17.1	6.8	-60.2%
2 Household <sup>1</sup>			
- Average Household Size	5.2 *	4.8 **	-7.7%
- % of household with housing	100 *	100 **	0.0%
- % of household with sanitation	25.8 *	46.3 **	79.5%
- % of household with electricity	64.0 *	90.5 **	41.1%
- % of household with clean water	65.0 *	85.8 **	32.0%
<b>IV Life Style Indicators</b>			
1 The prevalence of regular smokers by relevant groups <sup>2</sup>	21.5***	<b>24.8</b>	15.3%
2 The prevalence of regular alcoholic by relevant groups <sup>2</sup>	NA	<b>23.0</b>	
3 The prevalence of regular use of either heroine, stimulants and other hard drugs by relevant groups	NA	NA	
4 The prevalence CSW in reproductive by groups	NA	NA	
5 The prevalence of men with multiple sex partners	NA	NA	

Source: 1. Department of Statistics Malaysia (DOS)

2. 1996 NHMS2 data

Note: Special Keys Used:

- NA: Not Available
- Figures in **Bold and Italic** : 1996 NHMS2 data
- Figures in **Bold**: Only for Peninsular Malaysia
- CSW: Community Sex Worker
- \* 1980 Population and Housing Census data
- \*\* 1991 Population and Housing Census data
- \*\*\* 1986 NHMS1 data

## ENHR Indicators

INDICATOR	YEAR		% CHANGE
	1990	1997	
<b>V Human Development</b>			
1 HDI by group	0.718 (Ranked 56 th *)	0.834 (Ranked 60 th **)	16.2%
2 Other Indicators	NA	NA	
<b>VI Efficient Indicator</b>			
1 Expenditure on health expressed as the percentage of GDP spent on health <sup>1</sup>	3.0	3.7	23.3%
Expenditure on health expressed as the percentage of GDP spent on health (expenditure MOH in RM) <sup>2</sup>	1.1	1.2	9.1%
Percentage of GDP spent by the Government of Health on various type of services :			
- For PHC, Secondary Care Tertiary Care	NA	NA	
- For Preventive, promotive, treatment, rehabilitation	NA	NA	
Percentage of GDP spent by the people either through insurance or out-of pocket payment	0.5***	1.5****	200%
2 Expenditure per IMR population group (< 1 year)	NA	NA	
3 Expenditure per life expectancy by population groups	NA	NA	
<b>VII Quality Indicator</b>			
- Perception of technical quality of public versus private service by population groups	NA	NA	
- Average waiting time of public versus private facilities by population groups	NA	NA	

Source: 1. 1998, Rozita & Soe  
2. Finance Division , Ministry of Health Malaysia

Note: Special Keys Used:

- NA: Not Available
- Figures in **Bold and Italic** : NHMS2 1996
- Figures in **Bold**: Only for Peninsular Malaysia
- HDI: Human Development Index
- MOH: Ministry of Health
- \* 1990 United Nations Development Programme
- \*\* 1996 United Nations Development Programme
- \*\*\* Health Services Financing Study EPU
- \*\*\*\* 1996 NHMS2

## ENHR Indicators

INDICATOR	YEAR		% CHANGE
	1990	1997	
- Ability to choose practitioners in public and private facilities by population groups	NA	NA	
<b>VIII Affordability Indicators</b> <sup>1</sup>			
1 Subsidy given in government facilities			
- out-patient government(% Govern. Unit cost)	NA	23-97%	
- out-patient private (% private prices)	NA	92-98%	
- in-patient government(% Govern. Unit cost)	NA	77% **	
- in-patient private(% private prices)	NA	97% **	
2 Social insurance			
3 Voluntary insurance			
4 Fees-for-services			
- out-patient government clinic	NA	RM1.61	
- out-patient private clinic	NA	RM19.04	
- out-patient government hospital	NA	5.43	
- out-patient private hospital	NA	259.25	
- in-patient government hospital	NA	18.41	
- out-patient private hospital	NA	556.39	
5 % of expenditure on health vs. household expenditure	1.8	1.9 ***	5.6%
<b>IX Sustainability Indicators</b>			
1 Number of health facilities belong to :			
- Government (Hospitals) <sup>2</sup>			
- MOH Hospital	95	117	23.2%
- Non-MOH Hospital	5	6	20.0%
- Private sector (Hospitals)/Maternity/Nursing Home	174	221	27.0%
- Estate/Mines Hospitals	49	34	-30.6%
2 Use of health facilities by population groups for out-patient care ( <b>total attendance</b> )			
- Central government (MOH)	23,807,053	25,859,847	8.6%
- Local government (DBKL)	65,570	50,275	-23.3%
- Private hospital	2,131,374	3,754,966	76.2%

Source: 1. Rozita at.el, 1998  
2. Department of Statistics Malaysia (DOS)

Note: Special Keys Used:  
 - NA: Not Available  
 - Figures in **Bold and Italic**: NHMS2 1996  
 - Figures in **Bold**: Only for Peninsular Malaysia  
 - DBKL: Kuala Lumpur City Council  
 \*\*\* 1998 figure



ENHR Indicators

INDICATOR	YEAR		% CHANGE
	1990	1997	
Use of health facilities by population groups for out-patient care ( <b>% utilization</b> ) <sup>1</sup>			
- Private hospitals	NA	2.7%	
- Private clinics	NA	57.1%	
- Traditional/alternative	NA	2.3%	
- Others	NA	NA	
- Government clinic	NA	18.7%	
- Government hospital			
- District hospital	NA	9.4%	
- General hospital	NA	5.7%	
3 Use of health facilities by population groups for in-patient care ( <b>total admission</b> ) <sup>2</sup>			
- Central government (MOH)	1,307,609	1,559,280	19.2%
- Local government	NA	NA	
- Private sector (hospital only)	NA	NA	
- Government hospital	NA	NA	
- University hospital/others	NA	NA	
- Community facilities			
- Private facilities (Hospitals)	226,633	436,505	92.6%
Use of health facilities by population groups for in-patient care ( <b>prevalence rates</b> ) <sup>3</sup>			
- All hospitals	NA	7.2%	
- Government hospital	NA	5.6%	
- Private hospital	NA	1.4%	
- Other hospital	NA	0.2%	

Source: 1. NHMS2 figures. Report are utilisation rates by type of facility for people who reported recent illness/injury over a 2 week recall period.  
 2. Information and Documentation System Unit (IDS), Ministry of Health Malaysia  
 3. 1996, NHMS2 data

Note: Special Keys Used:  
 - NA: Not Available  
 - Figures in **Bold and Italic** : NHMS2 1996  
 - Figures in **Bold**: Only for Peninsular Malaysia