#### **CHAPTER III METHODOLOGY**

#### 3.1 Introduction

The core concept underlying research is its methodology, which is crucial role in answering the research questions adequately. The methods used in obtaining the data and information are critical since it provides a framework for achieving the desired results. This definition can be considered as a milestone as it implies that research methodology is a set of information gathering techniques as well as, the analysis of it.

The review of literature in the previous chapter provided the context of the problem in healthcare, theoretical background of the topic including findings in precedent studies. The aim of this chapter is to present the philosophical assumptions underpinning this research, as well as, to introduce the research strategy and methods used based on past studies. The chapter details the research method adopted and continues with an explanation of data collection and data analyses employed in the study.

The first part of the chapter contains the design of the conceptual framework, followed by development of the hypotheses, method used and data collection. The analytical aspect for the study will be discussed in the individual chapters.

## **3.2** Conceptual Framework

A conceptual framework is a representation of the main components of an issue of interest, showing their interrelationships. It develops a common understanding of which issues should be included in the study. Conceptual framework is based on the

identification of a key concept and the relationships among those concepts. The framework provides a context for interpreting the study findings and to explain the observations.

This part of the chapter will spell out the conceptual framework or a concept map as a guide in critically discussing the main objective of this thesis, 'an inquiry into privatisation's impact on healthcare services in Malaysia'. In light of the theoretical discussion and review of past literature in the previous chapter, the conceptual framework in Figure 2.1 is designed by focusing on current scenario of healthcare services in Malaysia.

According to WHO (1978), healthcare is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Healthcare can also be defined as the combined functioning of public health and personal healthcare services. However, in this study we refer to personal healthcare services with a focus on the formal sector. The major aspects of health services are financing and allocation of resources. Healthcare in any nation is shaped by the healthcare system, policy and context.

Health systems are all the activities whose primary purpose is to promote, restore or maintained health (WHO, 2000). It can be any organisations, institutions, and resources that are devoted to producing health actions. Health system in Malaysia is a dual system where it involves public and private sector. Meanwhile, health policy aims to improve health system performance and promoting health to people. Health policies are important because they directly or indirectly affect all aspects of daily life, actions, behaviours and decisions. Policies about health system can have insightful impacts on

citizens, patients and health professionals. Hence, this study is based on the current health system design, policy and context in Malaysia.

Healthcare provision in Malaysia can be divided into two; public healthcare and private healthcare. Public healthcare is a social obligation and it is a need for all, meanwhile private healthcare is a profit oriented and it is based on fee-for-service or out-of-pocket. The formalisation of privatisation accelerated the increase of private hospitals and government policy on health tourism helped further the expansion of private healthcare, especially by conglomerates. A conglomerate is a combination of two or more corporations engaged entirely in different businesses that fall under one corporate group, usually involving a parent company and many subsidiaries.

Citizens are likely to see healthcare delivery as a kind of public utility and subject it to the regulation usually imposed on utility. Public utility here refers to the universal access and quality services. Healthcare should be treated as a public utility to some extent. However, healthcare in Malaysia has been pushed by strong political forces away from regulation in the direction of pure competition. The importance of regulation has been underappreciated. Leaving healthcare to the market may cause market failure as discussed in the first part of this chapter.

Inefficiency of public utilities undeniably contribute to the healthcare problems in Malaysia especially in the dimension of financing, human resource and biasness between urban and rural. This study will undertake the three dimensions in discussing the impact of privatisation in Malaysia. The factors that will be evaluated in discussing the three dimensions are affordability, equity, efficiency and adequacy.



Source: Author.

# **3.3** Research Hypothesis

The research hypotheses were developed based on the objective and the framework designed for the study. Three hypotheses were formulated for analysis.

#### **3.3.1** Share of public healthcare expenditure in total healthcare expenditure.

Public healthcare will increase the equality of healthcare utilization. A country will perform well on macro-indicators where the health status of every individual is equally weighted when all groups of society have access to universal care. Healthcare utilisation is generally determined by the healthcare provision. The assumption for this study is the healthcare utilisation will grow larger if the public healthcare expenditure grows larger compared to the private healthcare expenditure. According to Wendt 2009: 434, one should expect that a higher share of public financing in healthcare can stabilize healthcare cost. Having this said, the study attempts to contribute on the understanding of the share of public healthcare expenditure in total healthcare expenditure in Malaysia as some of the literatures claims that public healthcare expenditure is on decline.

**Hypothesis 1**: The share of public healthcare expenditure over total healthcare expenditure is on a declining trend.

# **3.3.2** Experience doctors and nurses are moving from public hospitals to private practices.

Better access to healthcare for all cannot be made without sufficient health professionals. Human capital theory predicts that, a given worker will have a greater probability of quitting a low wage job than a higher paying one. Increasing demand on experienced doctors and nurses in the lucrative private healthcare hospitals caused the public hospitals to face maximum overload of patients. The continued shortage of experienced doctors and nurses in public hospitals over time will lead to a serious deterioration of service level. Therefore having sufficient experienced doctors and nurses in public hospitals is very important.

**Hypothesis 2**: Experienced doctors and nurses are moving from public hospitals to private healthcare centres, reducing the access for those who cannot afford quality medical services.

## **3.3.3** More doctors in urban areas.

According to human capital theory, domestic migration or international migration will flow from areas of relatively poor earning possibilities to places where opportunities are better. It is well known that the facilities and infrastructure in urban areas are far better than in the rural areas. High quality of healthcare services in rural areas depends on adequate supply of trained doctors. Concentration of doctors in urban areas compared to rural is considered as part of the overall social inequity and as a problem in health management system. Thus, this study endeavour to explore the higher level of urbanisation states bias on trained doctors in Malaysia.

**Hypothesis 3**: Higher concentration of doctors in higher level of urbanisation states reduces the access for population in lower level of urbanisation states in terms of quality healthcare.

## 3.4 Methodology

The study relies on secondary data, both published and those purchased from the Ministry of Health, Malaysia. The methodological focus of the study is on trends that can be identified quantitatively from important indicators of health quality, e.g. share of government financing of health, out of pocket payments by the public, share of specialist doctors in public hospitals, and concentration of specialist doctors in urban locations. Using interpretations of the trends, the purpose of this methodology is to explain how the public health care system that is used by the masses has evolved against the powerful forces of privitization.

### 3.4.1 Interpretive Approach

Interpretive approach is concerned with analysing trends and their causes using particular set of data. This approach was introduced by Jonathan Smith, in his seminal paper on 1996 as an alternative for other qualitative approaches such as grounded theory, conversation analysis, narrative psychology and others (Smith, 2004). However, we do not use phenomenology, which thrived in health psychology with strong interest in related fields such as social, clinical and counselling psychology (Brocki and Wearden, 2006).

In the field of healthcare, the interpretive approach gives a greater scope to address issues of influence and impact and to answer questions such as 'why' and 'how' based on available information. Analyses of this approach involve identifying the essence of the phenomenon under investigation, based on the data obtained and how the data are presented. It allows rigorous exploration. In this study, trend analysis and broad-based review of research literature is combined to identify the kind of experiences of healthcare that can matter with considerations of why these experiences might be important and how it relate to each other. The trend analysis allows seeing the effect of changes that has been made to improve performance over the years. The data in this study covers from the year 1980 till 2006. However there are some data that does not begin from 1980s. This is due to unpublished statistics and the data is questionable. While qualitative and subjective elements are important pillars of interpretive methodology we focus here only on quantitative data to interpret the impact of privatization on healthcare trends facing the masses in Malaysia.

## 3.4.2 Data Collection

This study is based on the secondary data. The secondary data was obtained from the Ministry of Health. The data have been collected and compiled from various sources. Public Expenditures data were collected from the Annual Report of Health Ministry meanwhile total health expenditure and private expenditure were from the Account Department of Ministry of Health. The data for the service providers were gained from the relevant departments in the Ministry of Health.

Some other related information was obtained from various Plans and Mid-Term Reviews, articles, form Department of Statistics and information supplied by other related reports. All price-based data collected were converted into constant figures using the GDP deflators before they were analysed. Among the data that will be used in this study are:

## 1. Healthcare Budget

Healthcare budget targets for healthcare spending. Budgets are intended to constrain both the level and rate of increase in healthcare cost by limiting them directly. A budget is the process of converting an operational plan into financial terms that can be achieved in a defined period of time, and enables government to measure the healthcare financial performance.

The data for healthcare budget for this study was collected from various annual reports of Ministry of Health from 1980 to 2009. The ministry reported that data for earlier years were not available.

#### 2. Total Public Health Expenditure

According to the WHO, public healthcare expenditure is the sum of outlays by government entities to purchase health-care services and goods. It comprises the outlays on health by all levels of government, social-security agencies, and direct expenditure by public firms. Expenditures on health include final consumption, subsidies to producers, and transfers to households (chiefly reimbursements for medical and pharmaceutical bills). It includes both recurrent and investment expenditures (including capital transfers) made during the year. Besides domestic funds it also includes external resources (mainly as grants passing through the government or loans channelled through the national budget).

Total public healthcare expenditure data was collected from various annual reports from Ministry of Health (MOH). However, there was difficulty in collecting public healthcare expenditure by states in Malaysia. This is due to the unavailability of data in the MOH reports. In order to obtain the data, a formal letter was sent to the Department of Accounts at MOH. The data provided by the Department of Accounts was only from 1997 to 2009. Due to this limitation, this study will be only analysing public healthcare expenditure by states from year 1997 to 2009.

## 3. Private Health Expenditure

Privately funded part of total health expenditure. Private sources of funds include out-of pocket payments (both over-the-counter and cost-sharing), private insurance and occupational of health care.

Private healthcare expenditure data were collected from the Malaysia National Health Accounts, Health Expenditure Report (1997-2010). The private healthcare expenditure data is only available from the year of 1997. According to the National Health Accounts Department, the data before year 1997 was not compiled using the same classifications, and hence, was not comparable with the data compile over the subsequent years. Taking this into consideration, this study will be using data of private healthcare expenditure starting from the year of 1997 to 2009.

# 4. Out-Of-Pocket Expenditure

Payment made by an individual patient directly to an healthcare provider, as distinct from payments made to a health insurance scheme or taken from government revenue.

Out-of pocket expenditure was collected from the National Health Accounts, Out-of Pocket Expenditure Report (1997-2010). The data before year 1997 was not available due to the incomplete and inconsistent way private healthcare expenditure data was gathered. The lack of data on private healthcare expenditure caused difficulties in calculating the out-of-pocket expenditure.

# 5. Health Care Providers

Health care providers in this study refer to the primary health care doctors, specialists and nurses.

The data for doctors in public and private hospitals was obtained from the Medical Practice Division in Ministry of Health. According to the staff in the Division, the data for number of doctors in public hospitals is available from the year of 1980. However, the data for private doctors is only available from the year of 1987. Since this study focuses on the distribution of doctors in public and private and to look at the changes, the study will be using data from 1987 for the purpose of analysis. The doctor to bed ratio data was also obtained from the Medical Practice Division Ministry of Health. The data is only available from the year of 1990.

The data on the number of specialists in public hospitals was collected from the Medical Development Division in Ministry of Health. Documented statistics on the number of specialist is available only from the year 1980 to 2005.

Information and data for nurses was obtained from the nursing Division in Ministry of Health. According to the staff from the division, data for the nurses is only available starting from the year of 1990 to 2010 for both public and private hospitals. The data was not properly compiled prior to 1990.

6. Health Care Providers in Higher and Lower Urbanisation Areas

Data of health care providers are segregated based on the geographical location of higher and lower urbanisation areas in order to determine if there are any biasness.

The data was collected from the Medical Practice Division, Ministry of Health. According to the staff in the division, the number of doctors by states in private hospital is only available from the year of 1990. Meanwhile the data for number of doctors in public hospitals is available from 1987. Since this study looks at the changes in public and private healthcare, the data used for the analyses is from 1990 to 2009.

# 3.5 Summary

Conceptual framework is designed based on the current health system design, policy and context in Malaysia. Qualitative method is chosen due to its ability to provide indepth interpretation on a given research issue. Interpretative approach is used in this study since it gives a greater scope to address issues of influence and impact and to answer questions such as 'why' and 'how'. Most importantly it allows rigorous mapping of the critical influences on the healthcare system facing the masses in Malaysia.