CHAPTER - I
INTRODUCTION

*People spend their health in gaining wealth and then spend their wealth to regain their health*
- *Spanish Proverb*

Enhancing the quality of life is an important objective of the development paradigm in many developing countries. Better health, education, equal and wider job opportunities to all, trustworthy and transparent administration, dignity, self-esteem and life security, sustainable and cleaner environment are the key manifestations of the quality of growth (World Bank, 2000). If the quality of human capital is not maintained, physical capital and natural resources cannot be properly utilized and growth could neither be sustained nor be qualitative. Health is a major determinant of human capital. The level of health status of a person is a robust reflection of the state of development of the nation. A nation with good health tends to be productive and productivity tends to uplift economic and societal developments.

World Health Organization (WHO) 1946 defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The health status is usually measured in terms of life expectancy at birth, infant mortality rate, fertility rate, crude birth rate and crude death rate. These indicators of health are determined by numerous factors such as per capita income, nutrition, housing, sanitation, drinking water, social infrastructure, health and medical care services provided by government, geographical, climate, employment status, incidence of poverty and the like (Reddy, 1994).

Health is an important entitlement that enhances ‘capabilities’ of the poor people leading to increase in ‘commodities’ and further improvement in health status (Dadibhavi and Bagalkoti, 1994; Bloom et.al., 2004). As investment in health increases the productive capacity of the working population and hence the level of income tends to rise, to the extent that it contributes to a decline in the incidence of poverty (Reddy and Selvaraju, 1994). With rapid improvement in health, particularly of the poor, ‘vicious circle’ of poverty can be converted into the ‘virtuous circle’ of prosperity (Mayer 1999; Bloom et al., 2004,). The Alma Ata Conference reaffirmed "Health for All" as the major social goal of the Governments. The objective of
attaining the goal, not only depends on the formulation of health policies and providing adequate facilities by the government but also on people’s perception.

Majority of the population, especially the poor and those residing in rural areas do not have access to modern health facilities. The poor are more vulnerable to disease because they are malnourished, forced to live in an environment that is unhygienic, congested, inadequate safe drinking water and poor sanitation. Moreover, there exists very high inequalities in health and human development across states; between rural and urban areas and across economic and gender divisions. Over the past few decades, inequity by economic class has worsened and the divide between rich and poor in terms of untreated illness and expenditure on healthcare services as well as in the use of both public and private healthcare institutions has widened. Compared with other developing countries, health status in India is not only below the level of all developing countries but has also shown a lower level of improvement. Poverty increase vulnerability to disease and at the same time restricts the access of the poor to the health facilities and further deprives them of regular income due to non-reporting for work regularly.

Development of healthcare services becomes an important issue for both developed and developing countries. Government as well as voluntary agencies all are taking initiative to improve healthcare facilities so that it could be accessible for everyone, both rich and poor. Healthcare facilities all over the world have increased to a large extent. Scientific discoveries revolutionized the treatment and prevention of many diseases. This has greatly contributed to increase in life expectancy and reduction of mortality. The antibiotic era has made it possible to control a large number of infectious disease for which no cure was earlier possible. Rapid strides have been made in the field of immunization, diagnostics, anaesthesia, surgical techniques and pharmaceuticals. Many speciality and super speciality hospitals have emerged providing care for most types of health problems. Nevertheless, utilization of health services is still a longstanding problem in the developing world. India had made rapid strides in the health sector. The health service programmes is not only directed at combating diseases but also to provide infrastructure such as improving the water supply, sanitation, immunization, health education combating malnutrition
and promoting the norm of small family. There was vast development in both public and private sector infrastructure.

An effort to improve the health status of the population is a major thrust area under the social development programme being undertaken in India. Improvement in the health status of people is linked to number of factors such as household income, public expenditure on healthcare delivery system, availability of private healthcare facilities and general environmental conditions affecting incidence of diseases. Health status was assumed to affect utility directly by the value that individual place on good health and indirectly through increasing healthy time and labour income. With rising income levels, the households are able to spend on better healthcare, education and nutrition leading to an improvement in health status. Improved health status of the people helps the process of economic development in a positive way.

To understand the organization of public health services in India, it is important to note that under India's federal structure of governance, the states are responsible for 'health'. The central government may plan and fund healthcare services, but the responsibility of implementation rests with the state governments. The responsibility of providing healthcare in India, a country of over a billion people, is shared by three major sectors - the public sector, the private sector and the household. Households provide a large proportion of first-level care in many settings, and this is especially true in a country like India where formal health services are unavailable or unaffordable to a significant section of the population. Basic preventive care is provided through sub centres and primary health centres (PHCs), which are also a source of curative care in a limited sense. At the secondary level, rural hospitals, community health centres and government hospitals in districts act as the referral centre to the primary level health centres. Tertiary healthcare is provided by speciality hospitals and medical institutions. Services are provided free of cost in most instances, although a fee may be charged for specific services such as laboratory tests or X-rays. Under the current system in Tamilnadu, PHCs are expected to provide 12 basic services. These include outpatient and inpatient services, deliveries, minor surgeries, ambulance services, anti-rabies vaccinations, administration of anti-snake venom, tetanus toxins, contraceptive and services
relating to medical termination of pregnancies, special clinics such as antenatal clinics, under-clinics, ophthalmic clinics and laboratory services. The rapidly growing private sector mainly provides curative services to those who can pay. The private sector is not organized but statutory bodies like the Indian Medical Association and the Medical Council of India regulate their activities, though to a limited extent. Traditional and indigenous systems of medicine also play an important role in meeting the needs to maintain the health condition.

In the first two Five-year plans a commitment was made to address the health needs of the population comprehensively with preventive, primitive and curative care provided through a wide network of community based health centres, in tune with the recommendations of the Bhore committee. But in the years that followed, the health sector appeared to be driven by technological forces and became physician-centered, reducing the pursuit of health to the provision of medical care. The broader determinants of health have been ignored, and investments in providing basic amenities, for improving nutrition and living conditions, in better education and quality of life for the people have taken a back seat. Today a combination of forces is pressing for an even greater market orientation of healthcare. The government’s initiative in introducing making payment for services would however hinder accessibility to health services. There is a steady withdrawal of state support for health services (www.tnhealth.org).

Various NSSO data clearly shows a major decline in utilization of the public health facilities for inpatient care and a corresponding increase in utilization of the same from public health providers in both rural and urban areas. Despite higher cost in the private sector, this shift shows that the people are losing trust in the public system. Critical shortage of health personnel, inadequate incentives, poor working conditions, lack of transparency in posting doctors in rural areas, poor outreach, time of services, insensitivity to local needs, inadequate salary, poor monitoring of services or facilities appear to be the main reasons for low utilization. Availability of the infrastructure and manpower in terms of quantity is almost a pre-condition for achieving better healthcare. The basis of the Alma Ata declaration was an acceptance that the most effective way to develop a cost effective and equitable system of healthcare was to focus on the delivery of basic health services.
Tamil Nadu is one of the two Indian States (the other being Kerala) where the healthcare infrastructure is considered to be good (Government of India, 1997-2002). Public sector has a dominant presence in Tamil Nadu, which owns 78 percent of the hospitals, 44.6 percent dispensaries and 77.7 percent of the beds in the State (Bhat, 1993). However, only about 30 percent of the patients actually seek care from this sector (Gumber, 1994; World Bank, 1995); in other words, utilization of public healthcare facilities is close to 50 percent in this State. Primary Health Centres (PHCs), in particular, accounted for extremely low level (3-4 percent) of illness episodes (Prabhu, 1997). Consequently, non-government providers treat a significant proportion of infectious diseases such as TB and malaria, which should be a major focus of public services.

A significant proportion of mutable factors influencing the utilization of a healthcare system (either public or private) by the population stem out of the supply side characteristics such as accessibility, appropriateness, effectiveness and efficiency (Kenneth 1983; Wensing et al., 1998). Under-utilization of the public healthcare system in many developing countries can be explained by this reasoning (World Bank, 1987). Recurrent expenditure on drugs and maintenance in these countries is under-funded and patients often face shortage of drugs and deteriorating buildings and equipment. Such factors considerably limit the effectiveness of the system. Inefficiency signifies wasted resources and therefore, could mean a lot to a developing country like India. In fact, elimination of inefficiency acts as a source of finance as it is equivalent to a significant increase in the resource availability (Berman and Sakai, 1989).

Utilization of healthcare is poor in Tamil Nadu despite the fact that physical access to such facilities is better. One of the reasons for sub-optimal utilization is the significant reduction in State’s recurrent expenditure on various facilities and schemes and the rate of decline was found to be 7.6 percent (NCAER, 1992). The expenditure rate was more pronounced in rural areas and on non-salary components. Consequently, in addition to the widening of rural-urban gap, man-material ratio too has gone up from 1.4 in 1974-75 to 2.3 in 1985-1988. Another reason is the absence of proper referral system; which has led to the paradoxical co-existence of under-utilization and crowding. In the past, nearly half of the
hospitalized in the state did not have any clinical referral or prior consultation. Moreover, there exists no formal coordination between public and private providers on the one hand and between various types of public providers on the other, resulting in the avoidable duplication and wastage of limited public resources.

**Out-of-Pocket Spending on Health**

In recent times, there has been a growing concern with the increasing cost of health services and the existing mechanisms for financing healthcare costs. Healthcare financing in India can be considered almost unique in several aspects. First, the share of public financing in total healthcare financing in the country is considerably low with 0.9 percent of GDP to an average share of 2.8 percent in low and middle-income countries or even relative to India’s share in disease burden (Schieber and Maeda, 1997). Second, the beneficiaries of this limited public health financing are not only the poor but also the well-off section of the society. Third, over 80 percent of the total health financing is private financing, much of which takes the form of out-of-pocket payments (i.e., user charges) and not any prepayment schemes (Misra et al. 2003). A significant proportion of the population is forced to make direct payments, often with a heavy burden of debt, to access healthcare from the market because the public provision is grossly inadequate or non-existent. Limited public funding on healthcare in the country has necessitated out-of-pocket spending to be the dominant component of the total healthcare expenditure.

Out-of-pocket (OOP) spending is the direct payments in-kind made to health practitioners and suppliers of pharmaceuticals, therapeutic appliances, and other goods and services whose primary intent is to contribute to the restoration or to the enhancement of the health status of individuals or population groups. Reliance on out-of-pocket payments is not only inefficient and less accountable than other methods of financing, but also iniquitous to the poor and the burden falls disproportionately more on those who are more susceptible to disease and are much likely to be pushed into poverty trap (Visaria and Gumber 1994, Gumber 1997). The World Bank (2002) estimates that one-quarter of all Indians fall into poverty as a direct result of medical expenses in the event of hospitalization. Over 40 percent of hospitalized Indians borrow heavily or sell assets to meet the hospital expenses and over 25 percent of them fall below poverty line due to catastrophic medical expenses.
(Goel, 2010). Out-of-pocket health expenditure is catastrophic if its share in the household budget is more than the arbitrary threshold level. For households below poverty line any expenditure on health is more catastrophic if they are unable to attain the subsistence level of consumption. Poorer households are more vulnerable than their richer counterparts.

The out-of-pocket expenses place a disproportionate burden for healthcare on poor households. This is because the systems of affordable healthcare services are non-existent or poorly developed. Therefore illnesses or accidents requiring hospitalization will have drastic effects on the households of the affected persons, especially for poor households. This is equally true of urban and rural households, but the effects may be particularly sharp among the rural population because of the relative paucity of any publicly provided treatment.

As a part of the health sector reforms initiated in the early 1990s most of the Indian states have introduced user charges in public health facilities for patients belonging to families above poverty line (Deaton, 1997). Due to low share of government in total healthcare expenditure and introduction of user fees in public sector, households have to bear most of the expenses in the event of health shock, which may lead to a fall in consumption expenditure below subsistence level, which is the catastrophic out-of-pocket health expenditure. According to the World Health Organisation (2004), more than 80 percent of the total expenditure on health in India is private and most of this flows directly from households to the private-for-profit healthcare sector. In 2006, 28 percent of rural residents and 20 percent of urban residents had no funds for healthcare. More than 40 percent of them had to borrow money or sell assets to pay for their medical care, while more than 35 percent of them fell below the poverty line because of hospital expenses (Sen, 2012).

Studies on healthcare spending indicate that out-of-pocket spending in India is actually progressive or equity neutral; as a proportion of non-food expenditure. However, because the poor lack the resources to pay for healthcare, they are far more likely to avoid going for care, or become indebted or impoverished trying to pay for it. On an average, the poorest quintile of Indians is 2.6 times more likely than the richest to forgo medical treatment when ill (Peters and Yazbeck 2001). Aside from cases where people believed that their illness was not serious, the main reason for
not seeking healthcare was cost. The richest quintile of the population is six times more likely than the poorest quintile to have been hospitalised in either the public or private sector (Mahal et.al, 2000). Peters et. al (2002) estimated that at least 24 percent of all Indians hospitalised fall below the poverty line because they are hospitalised, and that out-of-pocket spending on hospital care might have raised by two percent the proportion of the population in poverty.

With growing incidence of illness and rising cost of healthcare services and poor supply of funds from the government; most countries have sought an alternative option of funding healthcare services. This is the reasons why (Joglekar 2008) suggested the need to formulate appropriate policies to reduce the financial burden of illness on poor for which health insurance might be one of the instruments. This mechanism is adopted in India and many other countries of the world and is seen as a financial protection for everyone in the society.

**Evolution and Awareness of Health Insurance in India**

Of all the risks facing households, health risks pose the greatest threat to lives and livelihoods. The uncertainty of illness and the cost of health expenditure is always a peril. The high cost of hospital services coupled with the unpredictability of health needs and the inadequacy of personal savings is the primary reason for the growing importance of insurance as a means of financing health services. Medical insurance coverage separates time of payment from the time of use, thus making treatment within the reach of the insured. Inspite of the growing importance of health insurance schemes the number of people covered by health insurance is very less in India with only 1.6 percent of population covered and therefore households have to depend on informal networks to make healthcare payments. One of the major reasons for low health insurance coverage is the lack of awareness about the health schemes.

Insurance may be described as a social device to reduce or eliminate risk of life and property. Under the plan of insurance, a large number of people associate themselves by sharing risk, attached to individual insurance plan that exclusively covers healthcare costs and is called Health Insurance. In effect, insurance companies act to transfer insurance premiums from those who remain healthy to
those who become ill. Health insurance is substantially more valuable to the consumer and its additional income generates purchases of additional high-value care, often allowing sick persons to obtain life-saving care that they could not otherwise afford (Nyman, 2001). Health insurance is, thus, seen as financial protection against health related risk for everyone in the society and not only for working class. The concept of insurance is closely concerned with security. Insurance acts as a shield against risks and unforeseen circumstances.

Urban India experiences some coverage whereas rural India, where majority of the population resides, receives poor access of healthcare services and excess burden of diseases but has least coverage. Since income and employment status are the major determinants for the demand for health insurance, the insurance coverage rate is found to be high among better economic groups. The amount becomes unaffordable for the low-income groups and thus the outreach or coverage of health insurance is minimal. The poor and the rural sectors do not come under health insurance cover. Outreach is poor among the low income and below poverty groups. Since the general public is by and large ignorant about the benefits of availing healthcare insurance policies, there lies an urgent need to educate the masses regarding the importance of Healthcare Insurance and the benefits derived on account of it.

The public sector healthcare is under-funded and is suffering from quality and access problems resulting in higher dependence of consumers on private sector. Inadequate insurance locate the poor people in deep trouble. Low income people have to meet their healthcare needs from their own pockets (Randall and Gupta, 2000). Millions of people have inadequate and sometimes zero access to healthcare. It is for this a few state governments have successfully implemented universal health insurance scheme, which is a boost to the private health sector and it will pave the way for opening more hospitals in towns and villages (Aruna, 2011). The Indian Government has formulated Employee State Insurance Scheme (ESIS) that focuses on the public healthcare policy for low-income groups. The government employees can avail Central Government Health Scheme (CGHS) that offers medical treatment at a subsidized cost. With the opening up of insurance sector for private participation, numerous players have entered the healthcare segment, but inspite of
the entry of private sector, penetration of insurance coverage in India is abysmally low. Recently a legislature has been passed in the Indian Parliament allowing 49 percent of FDI in insurance industry.

Willingness to Pay For Health Insurance

Constrained government budget for health is a serious problem in many developing countries. Offering low-cost insurance to low-income households is one innovative method to finance healthcare problem and to avoid catastrophic out-of-pocket health expenditure. Currently private healthcare expenditures are a major source of revenue which is crowded out by government expenditure (Gaag, 2007). The success of this approach depends on the effective and sustained demand for these voluntary pre-paid insurance schemes. Determining the demand or willingness-to-pay for health is therefore crucial in ascertaining the feasibility of such scheme, establishing prices and setting potential subsidy levels. It is essential to obtain reliable information on the amounts that potential clients would be willing to pay, since it is the major determinant in influencing the choices (Dror, 2006).

Information about willingness to pay (WTP) for basic health insurance (BHI) can be defined from a normative perspective and a behavioural perspective. The maximum willingness to pay equals the compensation gain (i.e.) the income reduction that would maintain a respondent’s initial level of utility (Gafni, 1998). Willingness to pay is positively related with risk behaviour of the people. To assess the willingness to pay for health insurance there are many methods: contingent valuation method and bidding game method. The contingent valuation method (CVM) and choice experiments (CE), method normally known as conjoint analysis are employed to set a monetary value on a package of health and non-health benefits in the context of a specific intervention.

Contingent valuation is a survey method to elicit the maximum willingness to pay (WTP) for goods. First, the goods and a hypothetical market in which the goods can be bought are described to the respondents (the contingency). The respondents is then asked to state the maximum amount he/she would be willingness to pay (WTP) for the goods (the valuation). A number of previous studies have used contingent valuation to measure the willingness to pay (WTP) for health insurance in
developing countries including rural Ghana (Okyere et.al, 1997), rural India (Mathiyazhagan, 1998), rural Burkina Faso (Dong, 2003), rural Cameroon (Binam et.al, 2004), rural Nigeria (Ataguba John, 2007), rural China (Barnighausen et.al, 2007) and rural Vietnam (Lofgren Curt et.al, 2008).

**Research Gap**

Developing nations have been focusing on relevant infrastructure, technology, disease control and health outcomes in terms of deaths and disability-adjusted life years, largely ignoring the service quality aspect from the patient’s viewpoint. However, researchers opine that real improvement in quality of care cannot occur if the user perception is not involved (Thompson and Sunol, 1995). Patients’ perception is significant (Donabedian, 1980) as it impacts their ‘health-seeking behaviour’ (National Commission on Macroeconomics and Health Report, 2005) including utilization of services (Haddad and Fournier, 1995; Reerink and Sauerborn, 1996). It seeks involvement in issues directly related to them (Calnan, 1988) and enables the service provider to meet their expectations better (Calnan, 1998), and provides relevant information to the policy makers to improve the quality. Studies in developing nations in Asia such as Sri Lanka (Akin and Hutchinson, 1999), Nepal (Lafond, 1995) and Bangladesh (Andaleeb, 2000) have confirmed the impact of perceived quality of healthcare services on the utilization. Evidently, quality of healthcare is important and demands continuous attention. Keeping this in mind, the current study aims to measure the perception of users availing rural healthcare services. It also probes into relevance of health insurance scheme and the willingness of the people to avail its use and their willingness to pay. It also helps in providing valuable information to the policy makers about the areas that need attention for improvement in quality of healthcare.

**Need for the Study**

In most developing countries including India, utilisation of basic health services has remained poor. The situation is even worse in rural areas where both the living standards (World Health Organization, 2000) and the quality of healthcare services are low. Health risks pose the greatest threat to their lives and livelihoods. Even a minor health shock can cause a major impact on poor persons’ ability to work
and curtail their earning capacity. Moreover there is a strong link between health and income at low income levels. A health shock usually affects the poor the most (Dror and Jacquier 1999; Cohen and Sebstad 2003).

Recent household-level studies carried out in India both at national and regional levels have indicated that the proportion, patients pay for healthcare services are quite high. (Duggal and Amin, 1989; Sundar, 1995; George, 1997;). Beside the direct costs for treatment and drugs, indirect costs have to be shouldered by the household. There is a growing awareness that access to healthcare cannot be free-of-charge, due to the low level of government spending on health, nor funded mainly out-of-pocket by care-seekers, due to the regressive effect of this financing mode (James et al., 2006). This calls for an alternative cost sharing device where health insurance is considered as an efficient mechanism through pooling of the healthcare burden between the rich and the poor, between healthy and unhealthy and between young and aged.

Health Insurance has emerged as part of the reform drive in many countries, both as a way of augmenting financial resources available for care, and also as a means of better linking health demand to the provision of services (Dror, 2001). The current level of household expenditure is partly due to the poor accessibility of free Government healthcare facilities, particularly in rural areas. People may use and buy non-government healthcare partly because they do not have any cheap or good quality alternatives. People in the low-income group tend to delay the use of healthcare services until illness is severe, presumably in part to avoid payment, but such a delay will only increase the expenditure but also pose threat to life.

Against this background the current study aims to explore on certain issues relating to households use of healthcare services, perception of the functioning of the existing healthcare facilities, healthcare expenditure, the level of awareness on health insurance scheme and the factors determining rural households’ willingness to pay for the health insurance scheme. Findings from the study will assist in devising a more pragmatic method for ensuring successful implementation of the scheme in the rural areas.
Scope of the Study

There appear to be major barriers to the rural population to have access to primary healthcare services. While this may lead to general underutilization of health services by such population, there is some indication of users seeking to enter the health system directly at the secondary level, while others access non-state services ranging from direct purchase of medicine non-prescribed or medication, through private qualified and unqualified medical practitioners, to a range of indigenous medical systems (World Bank 1997; Peters et al. 2002). Knowledge of patterns of health-seeking behaviour among rural populations targeted within current health development policy and the factors influencing them are potentially of considerable value in identifying effective and efficient services to this group (Misra et al. 2003). With service utilization rates clearly linked to health outcomes across India (National Sample Survey Organisation, 1998; Misra et al. 2003), identifying barriers to the accessing of health services is a key task in supporting appropriate health systems development. The study thus addresses the health-seeking behaviour of a set of rural population in Coimbatore, with special reference to perceptions of the availability and quality of state services at the primary healthcare centres (PHCs) level vis-à-vis private hospitals (PHs), the burden of healthcare expenditure on the poor and their willingness to contribute to health insurance scheme.

Objectives of the Study

The objectives of the study are to:

- Investigate the socio-economic characteristics of the sample respondents.
- Examine their current health status of the selected samples.
- Explore the extent of utilization of healthcare services by the sample respondents.
- Estimate the healthcare expenditure and sources of meeting the healthcare expenditure.
- Assess the awareness level regarding health insurance and determine the willingness to join and pay for health insurance.
**Hypothesis**

The following hypothesis was framed for the study:

- The overall health status is independent of the socio-economic profile of the households.
- The variables that distinguish PHCs from PHs are household size, age and per capita expenditure.
- The benefits and problems in using healthcare services are the same for the users of PHCs and PHs.
- The utilization of health services are not only determined by the easy accessibility and good quality of services, but also by the economic level of the household and costs of treatment.
- Socio-economic factors and physical accessibility to quality health services are significant determinants of willingness to pay for health insurance.

The present study tries to explore the factors responsible for the poor accessibilities of healthcare services by the rural poor, the burden of healthcare cost and willingness to pay for healthcare. The findings will be of immense significance to the Government, decision-makers and stakeholders in devising appropriate strategy for ensuring adequate and optimal healthcare services.