# CHAPTER 1

# INTRODUCTION

## 1. Background and Problems

Health care is one of the basic human need. It is the right of citizens to receive basic health care regardless of ability to pay. In India basic health care is regarded as fundamental right to every citizen. The Bhore committee (1946) set up by the government of India had proposed a comprehensive public health program with the state guaranteeing that no one should be denied needed health care for want of ability to pay. Since then both the central and state governments have been spending a considerable amount of the budget on health care of the population.

However, with the burgeoning population, increasing demand and mounting cost of health care, the vast majority of poor people in India find it difficult to meet their health needs. The problem further gets aggravated by proportionally dwindling government budget on health care. The percent share of health outlay to total plan outlay has declined to 1.7 percent in the eight five year plan from 3.3 percent during the first five year plan. Moreover, experiences in India have shown that private household spending as a proportion of total health spending is quite significant and government expenditure on health of the people is relatively small in proportion to what is being spent by the household sector. Many studies have shown that more than 70 percent of the total health spending in India is contributed by household sector (IIM,1987, WDR,1993).This share is expected to raise further with the increasing demand as well as the emerging pattern of new diseases and widespread availability and use of advanced technology of treatment.

The National Health Policy (1983) clearly emphasized that "besides mobilizing the community resources, through its active participation in the implementation and management of national health and related programs, it would be necessary to device well considered health insurance schemes, on a state- wise basis, for mobilizing additional resources for health promotion and ensuring that the community share the services in keeping with its paying capacity." Since then many years have been passed but nothing seems to have

happened on the development of health insurance nor any major attempts were made to mobilize resources for higher allocations to health care.

Demand for health care, except in preventive aspects, is irregular and unpredictable. Moreover, people do not know when they need health care and how much they have to pay for it. More often than not, sudden illnesses cause huge financial losses for people, both in terms of direct and indirect costs. This special feature of health care suggests a potential role of health insurance in order to protect the individual and family against uncertainty events. Health Insurance protection for the poor rests on the premise that an episode of illness imposes undue economic burden on their incomes. It may also act indirectly as an income protection scheme for the poor since it prevents the erosion of their lower income.

### 1.1 Health and Demographic Scenario in India

#### Health Scenario

The investment in health sector in India has increased rapidly since the seventies particularly after the Alma Ata declaration of " Health For All By 2000 A.D". The per capita public expenditure on health care has now been increased by more than 50 times as compared to 1951. The central plan outlay on health has increased from Rs.652 million in the first plan to Rs.75759 million in the eight plan. Besides the absolute financial allocation, much improvement has also been recorded in the health infrastructure and facilities in both rural and urban areas. Number of medical colleges in the country has increased from barely 28 in 1951 to 105 in 1974, and 128 in 1991. Number of Primary Health Centers (PHC's) has increased by more than thirty times. Similarly, a tremendous increase of subcenters, doctors and nurses etc., has also been recorded. Number of hospitals for one hundred thousand population has increased from 7 in 1951 to 14 in 1991, number of doctors from 18 to 45, number of hospital beds from 32 to 94 respectively in 1991.

The enhancement of financial allocation and increase in health care infrastructure has resulted in the improvement of health status of people. The crude death rate has declined from 23 per thousand population in1951 to 8.5 in 1997. Infant mortality rate has shown a decline from 146 in 1951 to 74 in

Table 1.1 : Demographic and Socio- Economic Profile of India

| Demographic Profile | | | Vital Statistics | |
|---|---|---|---|---|
| Population (1991 Census) in million | | 846 | Crude Birth Rate | 29 |
| | Males | 439 | | |
| | Females | 407 | Crude Death Rate | 9.20 |
| Decennial Growth Rate | 1971-81 | 24.66 | Natural Growth Rate | 1.90 |
| | 1981-91 | 23.55 | | |
| Annual Exponential Growth Rate (%) | 1981-91 | 2.14 | Infant Mortality Rate | 74 |
| | | | Expected Life at Birth | |
| Area (Million Sq.Kms). | | 3.29 | Persons | 64.90 |
| | | | Males | 64.10 |
| | | | Females | 65.60 |
| Density of Population ( Per Sq. Kms.) | | 274 | **Socio- economic Statistics** | |
| Number of Districts | | 466 | Per Capita National Income ( 1995-96) | Rs.2573 |
| Number of Towns | | 4689 | | |
| % of Urban Population | | 25.30 | Per Capita availability of food grains ( in grms.) | 509.90 |
| Sex Ratio (Number of females per 1000 males) | | 927 | Work Participation Rate | |
| | | | Persons | 37.46 |
| | | | Males | 51.55 |
| | | | Females | 22.25 |
| | | | Percentage of Literates | |
| | | | Persons | 52.21 |
| | | | Males | 64.13 |
| | | | Females | 39.21 |

Note : US $ = 36 Indian Rupees (1997)

Source : Census of India, 1991 and Sample Registration System estimates, 1997, Registrar General, Government of India.

1994. The life expectancy of an average Indian has increased from 41 years in 1951 to 64.9 years in 1991 and particularly there is a relative improvement in the expectation of life for females.

## Demographic Scenario in India

India's population according to 1991 census is 846.3 million. In 1981, it was 683.3 million with a birth rate of 37.2 and death rate of 15.0 per 1000 population, growing at the rate of 2.22 percent annually. The estimated population as on 1st march,1995 was 911 million with a birth rate of 28.7 and death rate of 9.3 growing at the annual rate of 1.94 percent.

India has made a continuous effort to build the foundation of modern self reliant economy. The interrelation between population and socio- economic development was recognized right from the inception of planning process in 1951. The table1.1 shows the information on the demographic and socio-economic profile of Indian economy.

## 1.2 Public Financing Of Health Sector in India : Role of States

In India, health care is a state subject. Therefore state governments play the central role in financing public health care. Expenditures by the states makes up about 90 percent of total public health spending, but the part of what the states spend is funded by the central government. The central government's contributions to state's budget is confined to family planning and certain centrally sponsored disease control, nutrition, and related programs. Such programs may be either fully or partly funded from central government resources.

The states administer family planning and other centrally sponsored programs, and the money is channeled through their budgets. National progress to control diseases such as leprosy, malaria tuberculosis and immunization programs; and schemes that focus on nutrition like Integrated Child Development Scheme and National Minimum Needs Program are examples of centrally sponsored schemes. The central government's allocation of funds to these schemes in the states is guided by the state's needs; by their ability to spend funds efficiently on the purposes by which they are intended;

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and in the case of matching grant schemes, by their ability and willingness to provide matching funds.

Table 1.2 : Per Capita Public Expenditure on Health in India, 1974-1990 (constant 1988-89 rupees)

| Category | 1974-78 | 1978-82 | 1982-86 | 1986-90 |
|---|---|---|---|---|
| State Government Spending | | | | |
| From own resources | 30.67 | 38.38 | 48.99 | 55.60 |
| From central grants | 5.76 | 8.49 | 13.66 | 13.31 |
| Aggregate State Spending | 36.43 | 46.87 | 62.65 | 68.91 |
| Central Government Direct Spending | 4.10 | 5.06 | 5.81 | 6.15 |
| Aggregate Public Spending | 40.53 | 52.93 | 68.46 | 75.06 |

Source : Tulasidhar,1996. Government Health Expenditures in India, ihpp Working Paper. International Health Policy Program, Washington, D.C. P.5.

Trends in government expenditures in India in the past decades were heavily influenced by political developments. In particular, the years after India's 1971 elections saw a significant increase in government concern for poverty. The ensuring economic development plan was formulated to incorporate income distribution as one of its targets. In line with this, the plan introduced a number of welfare programs designed to strengthen facilities and services like primary health care, rural water supply and sanitation, primary education and nutrition etc. The per capita public expenditure on health rose significantly in real as well as in nominal terms. The table1.2 shows that the central and state governments together spent Rs. 75.06 per capita per year on health during 1986-90. This was an increase in real terms of close to 100 percent from the average of Rs.40.5 per capita per year during 1974-78.

## 2. The Problem

Informal sector constitutes a significant section of labour force in India. According to 1991 census, this segment of labour force is about 91.5 percent of total work force. Informal sector contributed about 65.66 percent of national income generated in the economy during1981 (Rao,1987). About 70 percent of the urban labour force in India is employed in informal sector (C.S.O,1991). This population of metropolitan cities has been growing quite fast with no comparable rate of increase in their amenities. In spite of the fact that informal sector provides more employment opportunities with low capital investment, the conditions of workers is deplorable with low wages, long hours of work, lack of job security and poor working conditions. The problems of health care of households in this sector is acute in metropolitan cities of the country and poses a big challenge.

The health system in India discriminates between the workers in the formal sector and the workers in the informal sector. The formal sector constitutes only a small proportion of labour force yet utilize health facilities disproportionately. The work force in formal sector has mainly been protected through the two major health insurance schemes such as Employees State Insurance Scheme (ESI) for workers of industrial sector and Central Government Health Scheme (CGHS) for employees of central government. The proportion of expenditure on ESIS and CGHS as a percentage of total health expenditure has increased steadily from 5.24 percent in the first five year plan (1951-1956) to 16.67 in the seventh plan -1991-96 (CHIB,1993). As on March 1996, the ESIS alone covered 7.4 million insured persons and nearly 22 million family members (ESIC,1996).

The development experiences in India in the past forty five years have resulted in significant improvement in the health conditions of labour force in the formal sector. However, informal sector has remained outside the purview of various labour enactment's.

The adverse effects of ill health are greater for those who are engaged in manual work, as they get ill more often, due to poor living condition. Their incomes depend exclusively on physical labour and they do not have enough savings to fall back upon and moreover they loose their daily earnings. In the case of low wage earners the problem of daily existence tend to minimize the

problem of illness so that symptoms which do not incapacitate them are often ignored. Even in the case of workers whose incomes are higher and more in comparison with their rural counter parts, the quality of life is worse as their conditions are unsatisfactory and requires higher direct and indirect costs to sustain in urban areas at a level where they can ensure their well-being. These households, moreover, are considered high risk-group for a wide range of morbidity including various types of communicable, respiratory and other contagious diseases. Besides, the prevailing urban environment with its inadequate sanitation, over-crowing and pollution etc. exposes the people to variety of infectious diseases.

Many studies in India have identified the deficiencies of the public health care system, which forced people to seek private health care services. In cities 73 out of every 100 persons use private health care facilities (Duggal and Amin,1989). However, a complete picture of the pattern of utilization of health care and economic burden associated with those engaged in manual work in the urban informal sector, particularly cities like Delhi is hardly available.

The problem of shortage of fund available for health care resulting from several changes such as dwindling government budget on health care, population growth, inflationary cost of health services and medical technology, transition of disease pattern from infectious to degenerative ones, and shifting demand towards more sophisticated medical technology etc. forced India, like other developing countries to find ways to optimize mobilization and efficient utilization of resources. Health insurance scheme is considered as one of a promising solution for the health care financing problem in these countries.

The role of health insurance scheme for workers outside the formal employment has been recognized by many, but not much attention seems to have been given in Delhi as yet to a study exploring the possibility of introducing a health insurance scheme for workers in informal sector. In this background this study has been carried out in Delhi.

## 3. Socio-Economic Background of Delhi

Delhi being the capital territory occupies a place of special importance in the administrative set up of India. Majority of population in Delhi is engaged in tertiary sector. Nearly 70 percent of the Net Domestic Product was derived

from the tertiary sector in 1990-91. Thirty-five percent of the income in the tertiary sector comes from finance, insurance, real estate and business services, and another 26 percent comes from community, social, and personal services. Industry also occupies an important role in Delhi's economy. During the past ten years there was an increase of 62 percent in the number of industrial Units. Own account enterprises form 54 percent of the total enterprises (C.S.O, 1990).

### 3.1. Demographic Indicators

The total population of Delhi according to the 1991 census is 9.42 million (table 1.3). The decadal population growth rate in Delhi during 1981-91 was 51.5 percent.. The labour force participation rate are 56.7 for male and 9.9 for female in urban area, and 45.3 for male and 5.1 for female in rural areas which was quite high compared with the national level of 23.9 percent. About 90 percent of the population lives in urban areas.

Table 1.3 : Trends in Basic Demographic Indicators, Delhi, 1971-91

| Index | 1971 | 1981 | 1991 |
|---|---|---|---|
| Population | 4,065,698 | 6,220,406 | 9,420,644 |
| Density (Population / $Km^2$) | 2738 | 4194 | 6352 |
| Percent Urban | 89.7 | 92.7 | 89.9 |
| Sex Ratio ( Number of females per 1000 males) | 801 | 808 | 827 |
| Percent 0 -14 Years old | 38.6 | 35.5 | NA |
| Percent 65 + Years old | 2.5 | 2.6 | NA |
| Percent literate | | | |
| Male | 63.7 | 68.4 | 82.0 |
| Female | 47.8 | 53.1 | 67.0 |
| Total | 56.6 | 61.5 | 75.3 |
| Exponential growth Rate | 4.25 | 4.25 | 4.15 |

Source : National Family Health Survey, Delhi 1993. P.5.

Table 1.4 : A comparison of Health Indicators of Delhi and India (1996)

| Index | Delhi | India |
|---|---|---|
| Neonatal mortality | 32.3 | 46.0 |
| Post neonatal mortality | 28.5 | 28.0 |
| Infant mortality | 64.0 | 76.0 |
| Child mortality | 17.2 | 32.0 |
| Under five mortality | 81.0 | 107.0 |
| Crude birth rate | 23.2 | 26.0 |

Source : Sample Registration System estimates, 1996. Registrar General, Govt. of India.

The population density in Delhi is quite high, 6352 per sq. km compared with the national average of 273. Sex ratio (number of females per 1,000 males) is low at 827 compared with the all India level of 927. The reasons for this is the selective migration of males to Delhi for employment. The percentage of the child population (age 0-14 years) and older population age (65+) was low at 35.5 percent and 2.8 percent respectively compared with the corresponding figures for all India of 39.6 percent and 3.8 percent.

The literacy rate is 75.3 percent, which is higher than in the country as a whole (52.2 percent). Delhi's male and female literacy rates of 82.0 percent and 67.0 percent are higher than the all India rates of 64.1 percent and 39.3 percent respectively. The average number of persons per household has reduced from 5.13 in 1981 census to 5.02 in 1991.

## 4. Research Questions

1. What is the magnitude of direct and indirect health expenditures of households engaged in informal sector.

2. What are the factors affecting their ability and willingness to pay for health care.

3. What are the essential conditions and other requirements for designing a health insurance scheme for the workers in urban informal sector.

## 5. Research Objectives

### General Objectives

The General objective of the study is to propose an appropriate health insurance scheme for the workers in urban informal sector in Delhi based on their household health expenditure, ability and willingness to pay for health care and existing sources and pattern of health care provision.

### Specific Objectives

1. To estimate the health expenditures of the households engaged in urban informal sector.

2. To analyze various factors that affect their ability and willingness to pay for health care.

3. To examine the sources and pattern of health care provision for urban informal sector population.

4. To explore the possibility of introducing a health insurance scheme for the workers engaged in urban informal sector.

## 6. Benefits of the Study

Firstly, the study will provide an insight into the household health expenditure of manual workers in informal sector. The estimate of the indirect cost including opportunity costs involved in seeking health care will help to know the real financial burden faced by this segment of the population. Secondly, the analysis of factors which influence households ability and willingness to pay for health care will help to derive proxy variables that can be used to determine the eligibility criteria for government subsidy on the premium. Thirdly, the study will examine essential conditions and other requirements for introducing a health insurance scheme for workers in urban informal sector. This would help the health planners and policy makers in

making any decision in this direction. The requirements and procedures illustrated in the study will provide an approach to selection of an appropriate scheme. Finally, this study can be used as a baseline for further and more detailed research in this area.

## 7. Limitations of the Study

Firstly, the primary data collected for this study is confined to a small area in Delhi and due to time constraints only 150 manual workers were interviewed. Obviously, a study of this nature requires a large sample size covering a larger area so that more reliable information could be obtained. Secondly, the analysis of factors influencing ability and willingness to pay for health care is based on many restrictive assumptions. The willingness to pay, in fact is a subjective phenomenon and therefore any indirect method of assessment may not yield a reliable result. It would have been better if households were asked to state the maximum amount they would be willing to contribute yearly for a health insurance scheme by providing some hypothetical situation. Thirdly, due to paucity of secondary data on various aspects relating to the introduction of health insurance scheme in Delhi, a detailed discussion of each element could not be carried out. Finally, the insurance schemes designed in this study would necessarily involve many practical problems for implementation. However, it is assumed that with proper political will and government initiatives, most of the problems could be solved.