UTILIZATION OF HEALTH INSURANCE IN URBAN INDIA AND ITS IMPACT ON TREATMENT SEEKING: AN ANALYSIS BASED ON NFHS – III DATA

Dissertation submitted to Jawaharlal Nehru University in partial fulfillment of the requirements for the award of the Degree of

MASTER OF PHILOSOPHY

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CERTIFICATE

I, ANURADHA MONDAL, certify that the dissertation entitled "**UTILIZATION OF HEALTH INSURANCE IN URBAN INDIA AND ITS IMPACT ON TREATMENT SEEKING: AN ANALYSIS BASED ON NFHS – III DATA**" of **MASTER OF PHILOSOPHY** is my bonafide work and may be placed before the examiners for evaluation.

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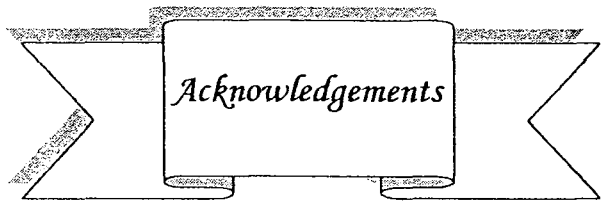
Dedicated

To

Late Dadu

Baba and Ma



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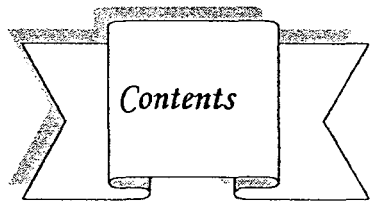
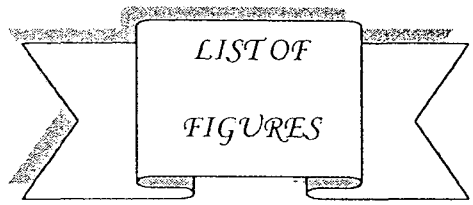




ACCORD - Action for Community Organization, Rehabilation and Development

ANC - Ante-Natal Care

CGHS - Central State Health Scheme

CHIP - Community Health Insurance Programme

ESIS - Employer State Insurance Scheme

GIC - General Insurance Company

HCB - Hospital Cash Benefit

IRDA - Insurance Regulatory and Development Authority

LIC - Life Insurance Company

LPM - Linear Probability Model

MRFE - Medical Reimbursement through Employer

MSB - Major Surgical Benefit

NFHS - National Family Health Survey

NGO - Non-Governmental Organization

NSSO - National Sample Survey Organization

OBC - Other Backward Caste

OHITE - Other Health Insurance through Employer

OPPCHI - Other Privately Purchased Common Health Insurance

PAP - Proportion of Ailing Persons

SC - Scheduled Caste

SEWA - Self-Employed Women Association

SHI - Social Health Insurance

ST - Scheduled Tribe

TPA - Third Party Administrators

WHO - World Health Organization

CHAPTER - 1

INTRODUCTION

1.1. Health Insurance: The Rationale

Health insurance is a kind of alternative source for health care financing, evolved on account to reduce the burden of medical expenses on the people. Incidence or frequency of illness is always uncertain and unpredictable, and the cost of health care services is often high and unaffordable. Moreover, there always exists a degree of uncertainty, since, disease occurrence and recuperation is quite uncertain, and to escape from the 'dilemma of uncertainty', people are inclined to have health insurance. Health insurance is thus, a means of financial protection against the risk of unexpected and expensive illness in the future.

In broader perspective, health insurance is considered as one form of risk-pooling, feasible in case of financial risks associated with illness (Abel-Smith, 1992). Risk pooling reduces risk for events that are unpredictable for individuals, each of whom is at risk, by distributing the share of risks among a group of individuals. Risk and uncertainty involved in future health care needs creates demand for health insurance. Health insurance thus provides the means by which risks of uncertain events are shared among many people. In a sense, health insurance is a facility of subsidized payment for receiving health care. In fact any form of free service or subsidized payment for health care against "premium", provided by any organization or employer to the people involved in it, is a sort of health insurance only.

Thus, the government implemented or private implemented programmes either compulsory or voluntary are not the only recognized health schemes. When ill, there are higher chances of loss of earnings, one, for not being able to work, and secondly, costs incurred on curing the ailment. Health insurance has thus developed to solve the

problems of income loss when sick, and later to secure the provision of an acceptable standard of health care. It has developed as a protection against the risks of ill health and earnings.

1.2. What calls for the need for health insurance: some evidences from India

Financing of health care is an important aspect of any country's health system. India, which stands way behind many fast developing countries such as China, Vietnam and Sri Lanka in health indicators, spends 6 per cent of GDP (2001) on health expenditure, which is higher than the level in many other developing countries in the Asian region (Prabhu and Selvaraju, 2002).

Several studies conducted reveal that India's health care financing is weak (Mahal, 2000; Baru, 2002; Prabhu and Selvaraju, 2002). Three-fourths of this expenditure is private and the remaining one-fourth is government funded; hence, the plight of the Indian population can be well understood in terms of seeking health care. One study has documented that inadequate attention has been paid by the government in financing the health sector and stressed on the inefficiency of the public sector (Prabhu and Selvaraju, 2002). They explore the role played by the public sector on health care expenditure. Their study on fourteen major states of India shows that the levels of public spending have increased from an average of Rs. 63.97 during 1980-81 and 1987-88 to Rs. 100.77 during 1998-99 and 2002-03. However, their estimation of growth rates reveals that only five out of fourteen states registered positive growth rates though not statistically significant.

In India, those seeking public and private health care facilities are burdened with heavy financial expenses in the form of out-of-pocket expenses for health care services (Ellis *et al.*, 2000). The lowest quintile section of population who often pay considerable amounts out-of-pocket on whom the disease of burden falls disproportionately more along with the burden of treatment, who are more susceptible to disease and who are much likely to be pushed into poverty trap (Visaria & Gumber 1994; Uplekar and George

1994; Sundar 1995; Gumber 1997; Prabhu and Selvaraju, 2002; Prasad and Sathyamala, 2002;). According to Mahal, Indian health care system suffers from cost, equity and quality problems (Mahal, 2000).

Studies reveal how the trend has been in utilizing health care services in India and the costs incurred by the households in receiving health care services. Krishnan's (1999) analysis of the 42nd Round of the NSS demonstrates the dependence on the public sector in several states and also among the poorer sections. Regarding cost in receiving health care, it is the private sector over the public sector which is higher and dominant. His further analysis of the 52nd Round of the NSS suggests that the costs of health care have risen and utilization of the private sector for hospitalization has also increased during the decade, with noticeable change that the lower middle sections accessing more of private sector and only the poor remaining satisfied with the government sector.

A study on the major states of India using NFHS-II, 1998-99, data show the extent to which the public system has collapsed. There has been very low use of public health and medical facilities in the rural and the urban areas by all segments of the society. Bihar, Uttar Pradesh, Punjab and Andhra Pradesh fall into this category. These states have higher inclination towards the use of private facilities. There are a few states (Tamil Nadu, Karnataka, West Bengal and Rajasthan) in which the deprived population is forced to access the poor quality public health facilities (Srinivasan and Mohanty, 2004).

Though the National Health Policy 1983, aimed to reduce disparity in the utilization of health care facilities, the disparity continues among the different expenditure groups as well as in the rural-urban areas. Based on the data of NSSO 43rd Round, Indian systems of medicine were found to have been utilized at a very low level. The maximum number of in-patient services was availed from the public hospitals, 55 and 59 per cent in rural and urban areas respectively; the private hospitals stand next in the hierarchy, while treatment by source in non-hospitalized cases revealed higher utilization of services of private doctors (Purohit and Siddiqui, 1994).

The study by Duggal (2002), based on various data sources, reveals that over the years how the services sought for health care has changed (Table 1). By source of treatment private facilities have been extensively used for out-patient care in both rural and urban areas. And the average cost incurred for receiving health care by type of facilities has gone up over the years. The cost has always been high in the private care sector.

Hence, the above studies reveal that the low cost health care services are still provided by the public sector but there is higher utilization of private facilities over the years, not only by the wealthy section but also from the low income groups; exceptions are the poorest of the poor.

In case of government funded health care system, the quality and access of services has always remained major concern. These facilities are mostly underfunded, understaffed and short of drugs and essential supplies (Uplekar and George, 1994) thus, affecting the overall market of the public sector. A very rapidly growing private health market has developed in India. This private sector bridges most of the gaps between the government and the people. The ability of the government and the need of the people are questioned. Moreover, with the propagation of various innovative technologies and price rise in the health care, the cost of care has not become very expensive but also unaffordable to large segment of population. Thus, people have started exploring various health financing options to deal with the set of complexities with the private sector growth and increasing cost of care.

In countries, where funding and services by the government in seeking health care is low, inefficient, unaffordable and of poor quality, and the total burden of medical expenditure falls on the mass, health insurance is seen as an alternative source of health care financing. Hence, a mechanism to reduce the pressure of poor financing by the government of these countries. The solution for preventing, increasing cost of health-care, is health insurance. Health insurance is thus defined as; a facility where individual

or group purchases in advance health coverage by paying a fee called "premium"(Mavalankar and Bhat, 2000).

Table 1.1

Trend in Utilization of Health Care Services in Major states of India

	Percent who sought treatment in Private Facilities		Average medical expenditure per ailment or per episode (in Rs.)					
Data Source	Rural	Urban	RURAL			URBAN		
			Public	Private	Total	Public	Private	Total
NSSO 1986-87								
Inpatient	40	40	320	733	597	385	1206	933
Outpatient	74	73	73	78	76	74	81	79
NSSO 1995-96								
Inpatient	55	57	2080	4300	3202	2195	5344	3921
Outpatient	64	72	110	168	157	146	185	178
NCAER 1990	58	56	169	147	152	126	164	143
NCAER 1993								
Inpatient	38	40	535	1877	1044	453	2319	1197
Outpatient	52	59	49	131	90	63	152	114

Source: Cited in Duggal (2002)

Health insurance has different forms in different countries. In the developed countries particularly in the U.S.A, the Medicare and Medicaid health scheme programs were established in the mid-1960s, the former to provide medical insurance for the elderly and the latter to ensure the poor. Medicare is available to all citizens aged 65 years and older, to some individuals under 65 if certain conditions are met, and to the disabled. To assist the elderly with the burden of increasing disability and chronic illness in the face of declining personal income, Medicare, Title XVIII of the Social Security Act, was enacted in 1965. It was designed not to provide total coverage of all medical costs, but to insure against unpredictable expensive events, such as hospitalization. Under Medicaid, individual must qualify in terms of income to enroll (Cafferat, 1984; Pol and Thomas 2001).

The 1970s witnessed the emergence of several alternative financing mechanisms for the coverage of health care costs, and by the 1980s the concept of "managed care" had become well established. Health maintenance organizations (HMOs) and preferred-provider organization (PPOs) that attempt to control costs by managing the utilization of physicians have become common (Pol and Thomas, 2001). The Americans obtain health insurance in different settings and through a variety of methods (Table 1.1):

Table 1.2

Health Insurance Coverage by Type of Insurance, U.S.A, 2003

Characteristics	Coverage Distribution (in percentage)	Persons (in millions)
Employment Based	61.8	178.2
Nongroup	9.2	26.5
Medicare	13.7	39.5
Medicaid/SCHIP/State programs	12.4	35.7
Military/Veterans Coverage	3.5	10.1
No Insurance	15.6	45.0
Total population	100	288.3

Source: Cited in Fernandez (2005)

In developing countries like India health insurance is a new concept except for the organized sector employees (Mavalankar and Bhat, 2000). However, the concept's first opening dates back to 1912, when the First Insurance Act was passed (Devadarsan *et al.*, 2004). In India, only 4.9 percent of the population is covered by health insurance, within which persists vast regional variation (NFHS III, 2005-06).

Overall, health insurance coverage is very low in India; only 9 per cent of the Indian workforce is covered by some form of health insurance through Central State Health Scheme (CGHS), Employer State Insurance Scheme (ESIS), Mediclaim etc., (Gumber, 2002). The percentage is low because, the government employees though have provision of free public health services; they in reality do not receive such benefits since

these services are inaccessible and sometimes results into out-of-pocket services. This would otherwise have raised the demand for health insurance from the market.

One analysis suggests that the existing voluntary health insurance plans in India cover only between 55 and 67 per cent of the total hospitalization cost and 10-20 per cent of the total outpatient health care burden on the households (Gumber, 2000). Even those who are covered under existing schemes, end up spending significant amounts out-of-pocket payments (Ellis *et al.*, 2000). Thus, forcing individuals to stay away from such 'beneficial schemes'. Moreover, in India, the participation in current schemes is largely dominated by nature of employment in the organized sector in spite of liberalization, privatization and globalization in Indian health (Gupta, 2002; Thaneshwar, 2006). A large segment of population engaged in low-paid informal sector is usually carved out, from any of the coverage of these schemes (Ellis *et al.*, 2000; Gupta 2002).

Health insurance is not widely covered across the population, because the concept is still unpopular among the people in India. Moreover, the coverage is weak because insurance policies have their own limitations and clauses, which are not always feasible for the population. Hence it is important to develop this sector to overcome the extreme health costs, which is a great burden for the low-income and the poor population.

1.3. Literature Review

A person usually gets insured to reduce the risk of events that might occur in future and for which the individual is not ready. Health insurance has been developed to lessen the impact of certain untimely and unpredictable health risks. Health insurance has developed to solve the problems of excessive out-of-pocket expenses; income loss when sick; and opens up the provision of acceptable standard of health care.

Resource allocation is important when resources are finite and the responsibility comes to decide on how best to use the resources available; the path opens to healthy

solutions like 'health insurance'. A brief review of various studies and different aspects of health insurance is presented here.

1.3.1 Why do people purchase Health Insurance?

Health insurance is seen as a type of financial arrangement which would help the consumers to reduce the burden of expenditures when seeking health services (Ellis *et al.*, 2000). Insurance is one provision of protection against any financial loss in the future due to health care use. It is thus a risk-minimizing arrangement to avoid the future losses (Fernandez *et al.*, 2005). Health insurance is purchased because it is a mechanism for gaining access to health care that would otherwise been unaffordable (Nyman, 1999).

The drive for purchasing health insurance is due to financial loss as a result of illness. Prolonged illness results into severe financial loss, which not only includes expenses on health, but also due to inability to work (Arrow, 1963; Asheim *et al.*, 2003; O'Brien, 2003). Thaneshwar (2006) sees prospect in health care funding and support system in sharing risks through health insurance. He further extends his views by remarking that health insurance is a requirement to help others against premium to minimize risk.

Scarcity of finances and rising cost of health services has forced the state governments to develop various other means for resource scarcity. Hence various insurance schemes have been seen as an alternative approach for resource allocation (Baru, 2002). Gupta (2002) concludes by saying that insurance is a type of financial arrangement which results into subsidized payment, no payment, or delayed payment for covering health expenses.

The need for health insurance has arisen due to the high hospitalization charges leading to high indebtedness for the low and middle-income section countries. In countries like India where government expenditure on health is low, and the major portion of health expenditure is shared by the private sector, out-of-pocket expenditure of

the households increases (Thaneshwar, 2006). Hence the resource crunch factor has forced open the option of health insurance.

1.3.2 Risk-pooling in Health Insurance

Health insurance is considered as a method for pooling of risks of different types of ill-health across individuals and over period of time (Wilensky *et al.*, 1984; Jutting, 2000). Insurance is one form of risk-pooling, to reduce the financial risks associated with illness. Risk pooling reduces risk for events that are unpredictable for any single individual. A group of individuals each of whom is at risk pool down their risks, by reducing individual risks (Abel-Smith, 1992).

Ahuja (2004) considers insurance as the mechanism for pooling of risks through prepaid schemes, and considers it as one of the significant contributors towards improvement of healthcare through investment and innovation. Insurance contributes to a common pool referred as the 'risk pool' by spreading risks across a group of people after allocating services according to need and distributing financial burdens according to the ability to pay. In this way, the actual costs of health services used by few people are shared among the group (Fernandez, 2005).

Health insurance is a mechanism which combines risk-pooling with mutual support, by allocating services according to need and distributing financial burdens according to the ability to pay (Thaneshwar, 2006). Jutting (2000) confirms the hypothesis through his analysis based on the community – financed section of population in some of the developing countries he studied. His study revealed that community-financing through pre-payment and risk-sharing reduced the financial barriers to health care as demonstrated by higher utilization but lower out-of pocket expenditure in the large majority of scheme members.

1.3.3 Determinants of access for health insurance

A study in Delhi, show that, low-income households are less insured accounting to 23 per cent, while almost half of the middle and high income households are insured. And out of the ill individuals, only 17, 46 and 43 per cent with coverage came from low, middle and high-income households indicating that those in the low-income categories are most likely to be affected by higher health costs, since these individuals are poorly covered by any kind of health schemes. Further in the study, it is shown that the percentage covered out of those who were not ill was 17.5 per cent (low income), 39.4 per cent (middle income) and 32 per cent (high income), respectively. Thus, those who were from the low-income areas had the same probability of being covered, whether ill or not. However, for the middle and high income areas, more of those who reported illness were insured than those who did not report any illness (Gupta, 2002).

Case studies by Jutting (2000) on developing countries (Senegal, Rwanda, India and Thailand) show that the determinants of the insurance coverage by means of community health financing have yielded mixed results, mainly regarding the significance of the factor 'income'. In the case studies of Rwanda and India, in contrast to the results in Senegal and Thailand, income was found not to be a significant determinant of membership status. In India both household surveys, findings had similar results; SEWA-membership was not strongly influenced by income. The results reveal that poor were just as likely to be included in the schemes as the better-off members.

1.3.4 Contribution by the Government or Employer or Individuals

The Central and State governments so far have introduced some mandatory health schemes such as the Employees State Insurance Scheme (ESIS) and Central Government Health Scheme (CGHS), for the workers in industrial sector; and for the state and central government employees and their families. They provide free medical care for both inpatient and outpatient services on co-payment basis to the organized workforce. These

schemes provide both medical and cash benefits for employees, and a wide range of services like preventive, promotive and curative care. However, ESIS and CGHS have not been successful in terms of coverage and quality of services. There is lack of equity in terms of coverage in India, the states with higher share of the total expenditure on ESIS are the only ones with a higher share of organized workforce (Uplekar and George 1994; Gumber, 2000; Ellis *et al.*, 2000; Thaneshwar, 2006).

In India in the formal sector, there is some coverage that employers offer as part of the medical benefits package. These are mainly the various schemes for government employees, medical allowance in the public sector, and in the private sector. Thus, not only private health insurance or the market purchased schemes, but also the free public provisions and reimbursements by employers (where health care provisions are received from own salaries through pre-payment), is recognized as forms of insurance (Ellis *et al.*, 2000). These facilities are common for large public and private enterprises, relevant to the railways, defence, mining, plantation sectors and certain educational institutions. And expenses incurred on these facilities are generally not found in the official records, but 50 million persons approximately are covered wholly or partially by these facilities. The employer managed health coverage is considered higher than the government owned schemes (Ellis *et al.*, 2000; Mavalankar and Bhat, 2000; Gumber, 2002).

Public insurance companies in India, so far have paid very little attention to voluntary medical insurance because of low-profitability and high risk together with lack of demand (Gumber, 1997). However, the General Insurance Company (GIC) and the Life Insurance Company (LIC) offer reimbursement schemes to individuals and groups and provide full or partial coverage to workers (Thaneshwar, 2006).

Since, there has been gap in reaching aid to the poor regarding health care from the market based schemes and other sources, certain NGOs have come up, and have introduced schemes to help the poor and especially in the rural areas and to disadvantaged people. Community Based Health Insurance (CBHI) is identified as the more suitable arrangement for providing insurance to the poor, and a means for

encouraging more equitable financing of health care and risk sharing (Ellis *et al.*, 2000; Baru, 2002; Ahuja, 2004; Devadarsan *et al.*, 2004; Thaneshwar, 2006). Baru (2002) suggests that, increasing rural indebtedness due to rising health costs can be overcome through community health financing by pooling in the 'risks' in the community.

1.3.5 Role of Health Insurance in the Health Care Sector

Health services are not governed by principles based on equity, universal and comprehensive since health care markets are driven by profits. Thus, health care utilization in India has demonstrated inequities across mass and income groups due to the availability, accessibility and affordability problems. And with increasing scarcity of finances of state governments, the approach towards financing health care has extended towards various types of health insurance (Baru, 2002).

There is a shortage of empirical evidence to assess whether or not insurance schemes have improved access and financial protection among the population. Some researchers however, make an attempt to trace the relationship between health insurance and health care utilization. Pol and Thomas (2001) consider health insurance as an indirect indicator that determines health services utilization for individuals and families. The type and extent of health insurance coverage further determines the same. Hahn's (1994) analysis based on the data from the National Medical Expenditure Survey show that utilization would increase for the uninsured if private insurance benefits were extended, whereas utilization would decrease for those with Medicaid in U.S. However, the magnitude of the increase depends on the type of care. Thus, the issue concerning health insurance coverage has centered on cost, but largely has not addressed the implications for health care utilization by these insured groups.

Lu *et al.*, (2003) sought to find out whether National health insurance (NHI) has any impact on health care utilization in Taiwan after its implementation. Before the NHI was introduced in 1995, 57 percent of Taiwan's people were insured. The uninsured were deterred from seeking necessary medical services, which further created unequal access

to health care between socioeconomic classes. The survey revealed that after the NHI began, those who were previously uninsured had increased their use of outpatient visits to the same level as those who were previously insured. The average hospital admission rate increased from 110 per 1,000 in 1994 to 120 per 1,000 in 1996.

An analysis based on National Health Interview Surveys (NHIS), 1992-2001, and Behavioral Risk Factor Surveillance System (BRFSS) data, revealed that in US, Medicare eligibility sharply reduced disparities in access to medical care. The probability of delaying or not receiving medical care also reduced and there was systematic increase in the number of visits to a doctor and 10 percent rise in hospital stays (Card *et al.*, 2004).

A case study on Gujarat, reveals that the insured with Employer State Insurance Scheme (ESIS) and Mediclaim scheme rely heavily on private facilities for treatment both in rural and urban areas, and they seek more facilities than the non-insured and SEWA households (Gupta, 2000)

Jutting's study of the developing countries including Senegal, Rwanda and India in 2000 shows that insurance in the form of Community-financing in villages have reduced financial barriers to health care as demonstrated by higher utilization but lower out-of-pocket expenditure in the large majority of scheme members. The results are by and large consistent in the individual cases; and even small-scale health insurance schemes on a community level contribute to increase utilization rates of the poor. In Senegal, scheme members have two-percentage point higher likelihood to use hospital care than non-members, and their out-of-pocket payment for hospital care decreased roughly by 50 per cent in comparison to non-members. While in Rwanda, members were six times more likely to access health care when sick compared to non-members. The result is mixed in case of India; result from survey one, show significant impact of SEWA-membership on the probability of using health care, but finds no impact on the total annual cost of health care utilization. In survey result two, from India, in contrast show SEWA-membership has no impact on the likelihood of being admitted for hospital care but finds that

membership reduces the total annual out-of-pocket payment level of hospitalization (Jutting, 2000).

1.3.6 Research Gaps

Only a few studies have been conducted on the health coverage. The issue of tapping health insurance coverage by type of schemes is less studied by the researchers. Efforts have been less; studies have focused on selected scheme coverage, thus making it difficult to understand the exact potential of other type of health schemes to improve health care financing. The role of health insurance to reduce out-of-pocket payments is also rarely studied. Coverage by socio-economic and demographic groups and inter-regional differences is not brought out in details, and there is less information on India. Impact of insurance on health care utilization further has not been explored extensively by the researchers. In the study, thus, an attempt has been made to fill few of these gaps.

1.4. Objectives

Health insurance is considered a significant player in the health market. The role it plays is not only limited to the release of burden of health care expenditure but it has significant role in health care utilization. As cited by researchers, Pol and Thomas (2001), consider many other correlates of health care utilization, (example: demographic, socio-cultural, and economic factors); health insurance plays a key role in determining health care utilization. Thus both the magnitude of health care source financing and key function in health care utilization provides a strong rationale for the study on health insurance potential in India.

According to the needs of the study, the following have been undertaken as objectives:

(1) To review the existing health insurance schemes in India.

(2) To assess the role played by the government in health-care financing in the country and contextualize the "health insurance" scenario in India.

(3) To assess the net influences of socio-cultural and economic factors on accessing

health insurance.

(4) To analyze the role played by health insurance in accessing health care facilities

1.5. Hypotheses

On the basis of the literature reviewed, the following hypotheses are proposed to be examined:

a) Various socio-economic determinants (education, ethnic group, religion, and wealth index) influence the membership status. Education and income are considered among the strongest influencing factors on health insurance since highly educated and high income households have more capacity to purchase health schemes.

b) Health insurance is a significant determinant that influences health care services. With health coverage the tendency to access health care services is assumed to increase.

1.6. Study Area

Health Insurance is not a very widely accepted concept in India. The plausible reasons for this statement are many. Firstly, insurance schemes not necessary always offer the best and profitable facilities to the consumer; and more so the already existing schemes are not properly tapped. The other reasons are the lack of interest and awareness of the people about the existing schemes, affecting the overall coverage. The National Family Health Survey-III has made an attempt to tap the coverage rate of health insurance in India. The data reveal that around 4.9 per cent of the population is covered by any health scheme. The coverage is further poor in the rural areas, where only 2.2 per cent population has some coverage. The urban areas respond to a significant coverage of over 10 per cent. Taking into consideration the fact of very low coverage in rural areas, the study aims to focus on urban India. In rural areas coverage by health schemes is weak, which makes detail statistical analysis difficult. Analysis on inter-regional differences and differences by socio-economic factors among the covered population is difficult. The study has thus further been conducted for large states in urban areas to give a clear picture of the regional coverage of health insurance.

1.7. Plan of the Study

The study is divided into six chapters. The first chapter deals with the introductory part of the present study concerned with. It investigates the need and scope of the current study, and also contains a description of the reviewed literature related to the study, including findings of various international and national studies. The remainder of the study is organized as follows. Chapter II consists of conceptual framework, information on the database, variable selection, and methodology of the study. The third chapter focuses mainly on the different types of health insurance schemes available in India, their strengths and weaknesses, an overall review. Chapter IV provides an overview of the existing pattern of health care financing in India and the costs incurred by the people in seeking health care. The focus is on the financial burden faced by the population of India. It also brings out the health insurance coverage in India in the recent period by means of micro-level analysis. Chapter V provides a detailed statistical analysis of the data to show the impact of health insurance coverage on health care utilization. The last chapter presents the summary of the study and suggests some policy measures to improve the coverage.

CHAPTER - 2

CONCEPTUAL FRAMEWORK

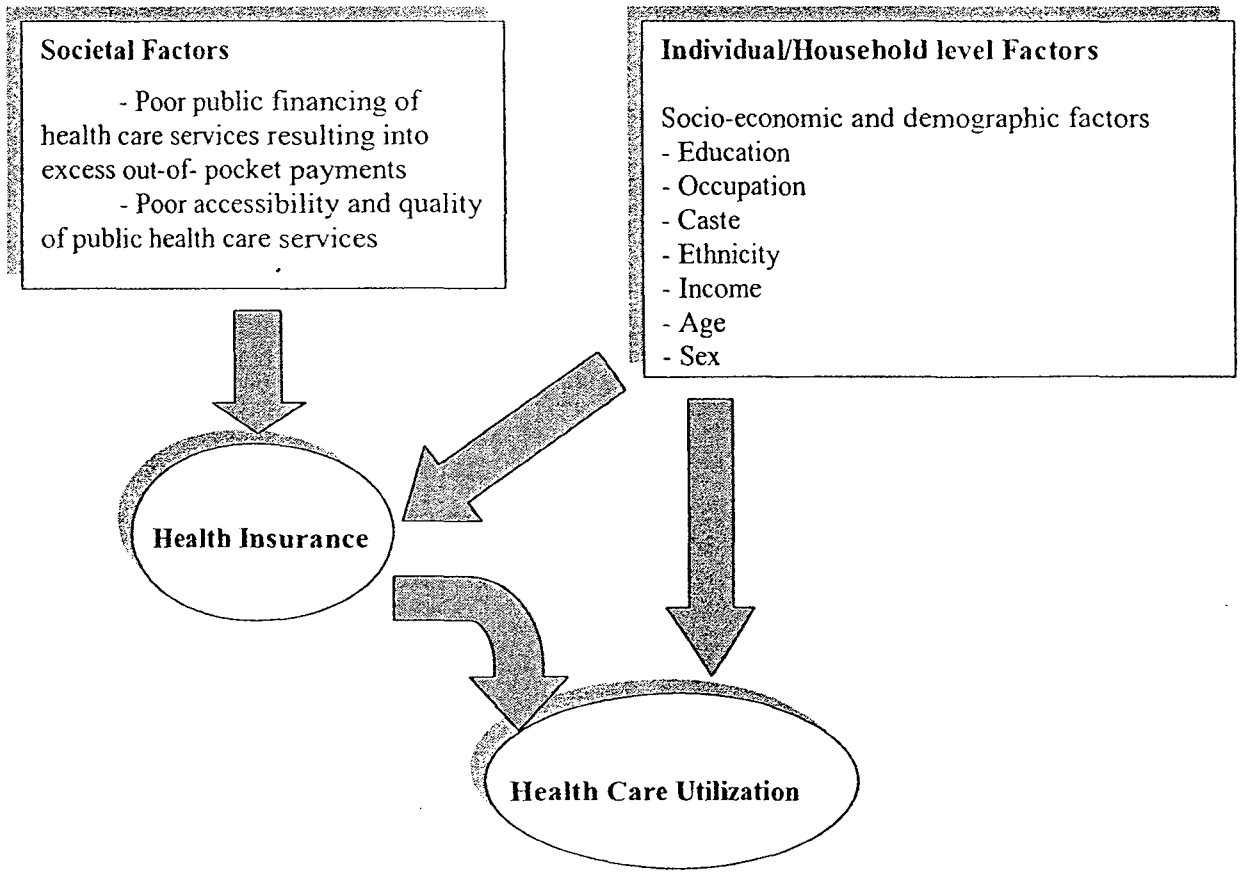
2.1. Introduction

The review of literature helps to form a clear picture of the issue at hand and also to identify the significant determining factors of health care utilization. A deeper understanding calls for an investigation of the influence of health insurance on health-seeking behavior. In investigating the pathways of influence, research confirms that the causal linkages between these two factors (Hahn, 1994; Gupta, 2000; Pol and Thomas, 2001; Lu *et al.*, 2003; Card *et al.*, 2004). Studies on the causal relationship between health insurance and respective factors on utilization of health care are, however scarce. The theme of the study is conceptualized with the help of a "framework", in order to understand the linkages between the variables. Though, the main focus of studying health seeking behaviour is through the impact of health insurance; other variables are also included for the study to understand the causal relationship between the variables. The socio-economic factors form the base for explaining further the health care utilization. Each of the factors work, as a set of sub-factors, directly on the health seeking behaviour. The frameworks depict insurance and a set of socio-economic factors affecting health care utilization.

Before constructing the framework for our study, it would be feasible to understand first what motivates an individual to purchase health insurance, thus a broad conceptual framework has been formulated (Figure 1). According to literature, in India, public health care funding is poor, which forces households to make more out-of-pocket payments to receive decent health care services; moreover, the public health services are inefficient, inaccessible and of poor quality, forcing further to avail the expensive private health services (Uplekar and George 1994; Sundar 1995; Gumber 1997; Prabhu and Selvaraju,

2002). Since illness and the price paid for curing illness are unpredictable events, these untimely and uncertain events often incur heavy burden on individuals in form of financial loss, due to lack of adequate options available. Health insurance has developed to reduce the risk of uncertain health events in the future, and also to reduce the burden of expensive health care services. Hence, purchasing health insurance is perceived as a 'choice' made by the individuals to reduce unpredictable health events and make health care services accessible and affordable.

Figure 2.1: Broad Conceptual Framework

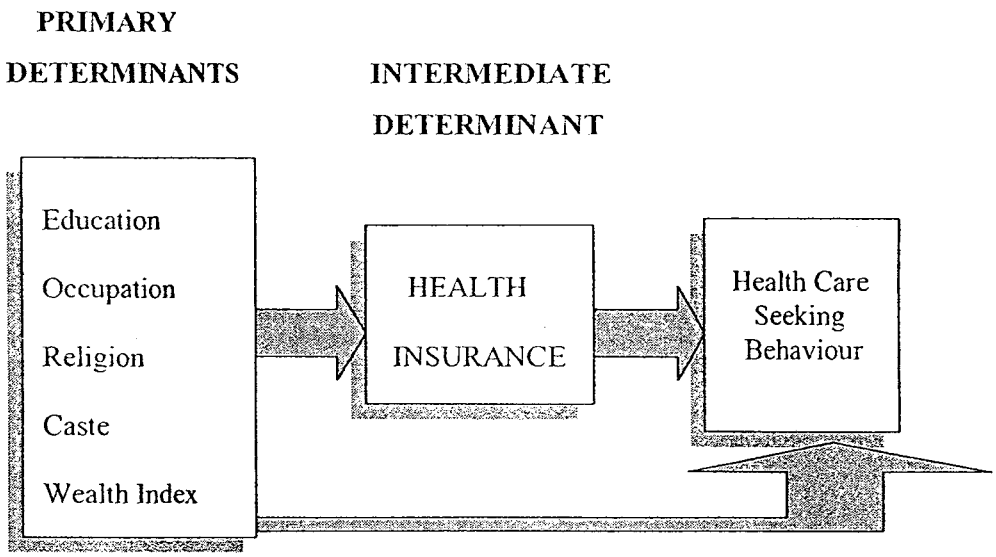


From the broad conceptual framework, the framework in this study has been extracted. The review of literature of previous studies attempts to show the linkages between various socio-economic factors that affect acceptance of health insurance, and the direct impact of health insurance on health care utilization (Gupta, 2000; Jutting, 2000; Lu *et al.*, 2003; Card *et al.*, 2004)

The socio-economic factors especially income and education are assumed to be strong driving forces in the acceptance of health insurance. High income households have more purchasing power, and the educated mass is more aware of their needs. Since there is societal difference in our country, health insurance coverage by caste and religion are considered as important indicators to be studied. While type of occupation of the households, also determine employer support to health schemes or health insurance.

Health insurance alone is not the only plausible factor in determining health care utilization. Household level factors have great influence on health care seeking behaviour. Health insurance determines the use of health care facilities but there are other influencing factors which also control the use of health care services. A household's income and level of education are the two most important influencing factors to seek care, along with health insurance. There is a strong interrelationship between the variables; without money, and awareness about health insurance, the households will not purchase it; and without the same, health care seeking behaviour will be affected. The role of health insurance comes into play here, as it drives the extra demand for utilization of health care.

Figure 2.2: Conceptual Framework of the Study



2.2. Data Source

The findings in the study are based on variety of sources. In addition to reviewing of substantial mass of literature, there is extended information from a number of insurance companies. Besides, data have been provided by the National Family Health Survey-III, 2005-06, India at the household level on health insurance coverage in India.

The NFHS-III, interviewed all women age 15-49 and all men age 15-54 and it includes several emerging issues such as perinatal mortality, male involvement in maternal health care, adolescent reproductive health, higher-risk sexual behaviour, family life education, safe injections, and knowledge about tuberculosis. In addition, NFHS-3 carried out blood testing for HIV to provide, for the first time in India, population-based data on HIV prevalence. NFHS-3 also collected information on population and health

indicators for slum and non-slum populations in eight cities, namely Chennai, Delhi, Hyderabad, Indore, Kolkata, Meerut, Mumbai, and Nagpur. The survey collected information from a nationally representative sample of 109,041 households, 124,385 women age 15-49, and 74,369 men age 15-54. The NFHS-3 sample covers 99 percent of India's population living in all 29 states. The survey was conducted in two phases from November 2005 to August 2006.

The National Family Health Survey-III (NFHS-III) data is mainly used for the analysis. The NFHS provides unit level data, and for the first time in NFHS-III, data on health insurance has been collected. The data is obtained from the household dataset, in which the information has been given on, whether any usual member of the household covered by a health scheme or health insurance, and what type of health scheme or health insurance do the household avail. Out of 1.09 lakh households covered, 6871 are said to have reported to have been covered by any type of health scheme or insurance, which accounts to 6.3 per cent (unweighted) of the total population surveyed. After applying sample weights, the estimate is even lower, 4.9 per cent. The gap increases when we compare the regional level variation, urban India accounts for 10.4 per cent in the urban population, while only 2.2 per cent of rural population. This suggests there has been poor outreach of health insurance in the rural areas. At such a low level of utilization, socio-economic differentials would be too small to assess statistically. Hence, the rural areas have not been studied further. Most of the analysis pertains to households in urban areas.

The study also focuses on the health care utilization of the households. Maternal and child health care utilization; and treatment seeking behaviour have been studied. The household and child file have been used for the above analysis. Other information has also been used for analysis, these relate to socio-economic background and includes religion, caste, education, occupation, and wealth index.

2.3. Explanation of the Variables Used in the Analysis:

All households in the National Family Health Survey were asked to give a complete account of all the members who had any health insurance or were covered by any health scheme, followed by the type of health insurance or health scheme by which they were covered. This information was used to calculate the coverage rate of the health insurance in India and coverage by type of schemes. Along with this, information on utilization of maternal and child health care from women who had given birth in the last five years prior to the survey, and general utilization of health care, when members are usually sick was collected from the respondents to analyze the impact of health insurance on utilization of health care. Information on socio-economic conditions was also collected, and used as independent variables for the analysis.

2.3.1 Measurement of Variables:

The dependent variable is health seeking behaviour of the households (such as, type of facilities availed when members are usually sick, type of antenatal and delivery care sought, and treatment seeking behaviour when the child is ill). The variables are selected according to the need of the study and the availability of data. The study focuses on the impact of insurance on the health seeking behaviour of the households, since it is a mechanism to control excess medical expenditure of the households. Each dependent variable is dichotomous. Health insurance (any member of household being covered by a health insurance scheme) is the intermediate variable. The independent variables are caste, education of husband and wife, religion, occupation of the respondent's partner, and economic condition of the household considered as the socio-economic variable. Their measurement and coding for the analysis is given below.

Dependent Variables

The women who have given births within five year before the survey have been taken for the study for measuring maternal and child health care seeking behaviour since

the NFHS-III collected information on them. The need to seek care arises when a person is ill and wants to take treatment. The need to seek also arises not necessarily when a person is ill, but in case of routine check-up and other type of care. Women who had sought care for delivery and took antenatal care were analyzed. The influence of insurance and other socio-economic variables, as other controlling factors, on maternal health care was studied. Similarly, insurance influences treatment seeking behaviour. Money decides whether to abstain or avail for care, thus the general notion that the tendency to avail health care increases with the availability of subsidized payment. Children who had diarrhea and fever in last two weeks prior the survey and whether treatment sought for the disease were analyzed.

The other aspect studied is type of facility availed for health care. People may use public or private facilities depending on affordability and quality reasons. Public health care facilities usually run at a low cost and in some cases treatment received is often free, but at the same time the services received are of poor quality. Thus, the low income households and the needy avail most of these facilities to reduce the excess expenses. In contrast, the services provided by the private health care sector are qualitatively strong but are highly paid services. Health insurance drives accessibility to care possible by reducing the risk of indebtness and opens up the door to access care freely to certain extent.

Thus, two variables are examined:
i) Utilization of health care: whether utilized or not
ii) Source of health care service: public or private
These are examined in various contexts as given below:

Antenatal Care (ANC): Full or adequate antenatal care is defined as at least two tetanus injections, three antenatal checkups and iron folic acid supplements up to ninety days during pregnancy (MOHFW). Based on the available details, antenatal was categorized into, (a) no antenatal care (ANC), and (b) received some ANC. The antenatal differs from National Family Health Survey (NFHS) report as the report includes only antenatal visit

as the indicator of antenatal care. The recoding for ANC is done as for no antenatal care = 0 and for received antenatal care = 1.

Delivery Care: In this case, only the source matters. The respondent was asked about the type of delivery care she had gone for. The place of delivery variable thus, has been categorized into home and institutional. Place of delivery is recoded as: home = 0 and institutional = 1.

Treatment Sought in case of Diarrhea: Women whose children had diarrhea were asked about the period of occurrence of the disease. The NFHS had asked if diarrhea had occurred (a) in last 24 hours prior to the survey and (b) in last two weeks prior to the survey. The children who had diarrhea in at both timings were clubbed into one variable and then medical treatment sought in case of the illness was analyzed. Medical treatment sought in case of diarrhea is recoded as: no treatment = 0 and received treatment = 1.

Treatment Sought in case of Fever: Women whose children had fever in the last two weeks prior to the survey were asked if any medical treatment was given. Medical treatment sought in case of fever is recoded as: no treatment = 0 and received treatment = 1.

Treatment sought in general: Analysis for this variable was drawn through the question "When members of household get sick, where they generally go for treatment?" This variable is sub-divided into (a) public facility, (b) private facility, and (c) other (no treatment, shop, etc). The recoding for, public facility = 0 and private facility = 1 and other (no treatment, shop, etc) = 2

Independent Variables

The predictor variables determining health care utilization are having health insurance and various socio-economic factors.

Health insurance: NFHS has asked the head of the household "Is any usual member of the household covered by a health scheme or health insurance?", followed by a question, on the type of health scheme or health insurance. Health insurance has been taken as an important variable for analyzing health care utilization because of its role in controlling out-of-pocket payments in receiving health care services. Cost of health care is very high which often forces a household to lose a good amount of their savings. Health insurance takes care of these issues and makes accessibility to health care user free.

This is the central variable in this study. In one analysis this is the dependent variable (on socio-economic factors) and for utilization, this is an explanatory variable. It is defined as: any member insured = 1 and none insured = 0.

A limitation to be noted here is that a household with any member insured is treated as 'insured' though the policy or scheme may not necessarily cover all the members. But the specifics of the persons insured are not available.

Ethnicity: Ethnicity has been considered in the analysis since the societal position of each caste varies. The discrimination in the society increases the risk of exclusion from essential services. In India different castes and tribes represents different life conditions, values and social choices. The effect of caste/tribes on health insurance is mediated by the interplay of factors like access to health services.

Ethnicity has been categorized into four categories such as, Scheduled Caste (SC), Scheduled Tribe (ST), Other Backward Caste (OBC) and 'other' community. In the analysis, the coding is: 'other caste' = 1, SC = 2, ST = 3 and OBC = 4.

Education: In case of the analysis for antenatal care, delivery and child illness, education of the woman (mother of the child) and her husband have been used in the analysis, because both the variables are important, since the general notion is that education makes a society progressive. While to study the coverage of health insurance among the educated classes, education of the household members above the age of 21 years with the

highest education was computed. With higher education, the level of exposure to worldly knowledge increases. Highly educated households are expected to have maximum health insurance coverage. For both cases, education is recoded as: illiterate = 0, primary educated = 1, secondary educated = 2, and highly educated = 3.

Religion: Religion has been considered for the analysis because each community is distinct from each other. Religion is categorized into three; Hindus and Muslims are kept separately because they comprise the largest section of the population in India, while all other religion is clubbed into one religion as 'other'. Religion is recoded as: Hindu = 1, Muslims = 2, and 'Other religion' = 3.

Occupation: Work status of the households decides the condition of the household. In the analysis occupation of the husband has been taken because the number of working women is less in urban India. The working status facilitates the fact of purchasing power of goods and services in a household. The nature to enroll into insurance facilities is plausibly determined by the working status of the household, which further determines the utilization health care services. Occupation is recoded as, not working = 1, non-manual work = 1, and manual work = 2.

Wealth Index: Wealth index[1] can be considered as a proxy of household income. On an average, households in the bottom quintile suffer from inequalities in access to health care services. The spending on health by the poor takes a major share from their income. So, poor people do not prefer to seek treatment from medical institutions. Based on the levels of ownership of assets, housing conditions and landholding, wealth index has been

[1] The NFHS-3 wealth index is based on the following 33 assets and housing characteristics: household electrification; type of windows; drinking water source; type of toilet facility; type of flooring; material of exterior walls; type of roofing; cooking fuel; house ownership; number of household members per sleeping room; ownership of a bank or post-office account; and ownership of a mattress, a pressure cooker, a chair, a cot/bed, a table, an electric fan, a radio/transistor, a black and white television, a colour television, a sewing machine, a mobile telephone, any other telephone, a computer, a refrigerator, a watch or clock, a bicycle, a motorcycle or scooter, an animal-drawn cart, a car, a water pump, a thresher, and a tractor (IIPS and Macro-International, 2007).

categorized into five classes. Wealth index is coded as: poorest = 1, poorer = 2, middle = 3, richer = 4, and richest = 5.

2.4. METHODOLOGY

The study mainly uses the following quantitative research methods:

Univariate and Bivariate Analysis

To study the percentage distribution of variable characteristics, univariate analysis is done. To measure the coverage rate of health insurance in the households and across the states, percentage was calculated, by taking into account the persons insured out of the total population. After the percentage was calculated and the coverage rate across the urban states was found out, states were divided into three levels of coverage (low, medium and high) by using the following simple technique:

(a) To demarcate the states according to the size of coverage, range was calculated by taking the state with highest coverage (Gujarat – 17.7 per cent) and state with the lowest coverage (Meghalaya – 1.4 per cent).

$$\text{Range} = \frac{17.7 - 1.4}{3} = \frac{16.3}{3} = 5.4$$

(b) The states were then categorized into 'low coverage states', 'medium coverage states' and 'high coverage states', taking class interval for each category as, ' Below 5.4', '5.4 to 10.8', and 'Above 10.8'. The method has been applied for making the analysis easier.

Bivariate analysis is used to understand the association between dependent variables or two nominal variables with the help of cross-tabulation. Cross-tabulation shows comparison between groups. According to one of the objective in this study association between health insurance by socio-economic factors was analyzed and

secondly, based on another objective, health seeking behaviour by health insurance and different socio-economic factors has been analyzed.

Multivariate Analysis

Multivariate analysis encompasses a variety of statistical methods used to analyze measurements on two or more variables. Regression analysis is thus a subset of multivariate analysis that includes methods for predicting values of one or more predictor variables from one variable or more response variables (Rotherford and Choe, 1993). The net effect of one variable by controlling the other variables on the dependent variable is studied through logistic regression. Here in the study the dependent variable is health care utilization which is dichotomous in nature. The following methodology has been used for the analysis:

The response variables in this study are dichotomous in nature, taking 1 or 0 as value.

Most commonly used approaches to estimate these types of models are:

a) The linear probability model (LPM).

b) The probit model.

c) The logit model or logistic regression model (Gujarati, 1995).

So we need such a probability model, where the probability changes as the value of predictor variable changes but the value of P never goes beyond the (0,1) interval and also the relationship between P and the predictor variable in nonlinear. Probit and logit models fulfill these two criteria. The tails of sigmoid curve in a logistic model level off before reaching P=0 or P=1. Thus the impossible values of P (P<0 or P>1) are avoided. For this reason binary logistic model has been selected in our study for the multivariate analysis.

In a Logistic Regression model we assume that the P (probability of occurrence of events) is related to the independent variables in the form of logistic instead of linear function. Logistic Regression is used to access the net effect of health insurance and socio-economic factors on health care utilization. The equation used in this analysis is given as follows:

$$\text{Log } \{P/(1-P)\} = b_0 + b_1 x_1 + b_2 x_2 + b_3 x_3 + \ldots\ldots b_k x_k.$$

Where, b_0 is constant,

$x_1, x_2, \ldots\ldots$ are the independent variables.

$b_1, b_2, \ldots\ldots$ are the coefficients of $x_1, x_2, \ldots$.

P is the estimated probability of health seeking behaviour. The quantity P/(1-P) is called the odds, hence the qualifying log { P/(1-P)} is called the log odds or the logit of P. The logit regression coefficient for a category of variable is interpreted in relation to the reference category; exp. (coefficient of a category) gives the 'odds ratio'; ratio of odds for the specified category to the odds of the reference category. This technique will be used to determine the predictors for subscription to health insurance and various aspects of health seeking behaviour which are dichotomous dependent variables.

2.5. Limitations

Information on health insurance is very limited. Information on households covered by any health insurance and the type of insurance has only been provided, which limits the scope of detail analysis. The detail information of the members 'who' are insured has not been provided. The age and sex of the insurers is important to understand the nature of the population who access health insurance. And also information on the type of schemes purchased from the market, at least the popular schemes (like mediclaim, LIC schemes etc.) have not been provided. Information on general health care utilization is also weak in the NFHS survey, which further limits our scope for the study.

CHAPTER – 3

HEALTH INSURANCE: AN OVERVIEW OF THE EXISTING SCHEMES IN INDIA

3.1. Introduction

When financing becomes a burden, looking for other suitable options becomes a priority. Some such options have developed, like the 'health insurance' to enhance financial support to individuals and families. Health insurance is a means of financial protection against the risk of unexpected and expensive illness in the future, since incidence or frequency of illness is always uncertain and unpredictable, and the cost of health care services is often high and unaffordable. Health insurance thus, provides the means by which risks, or uncertain events, are shared between many people. In other words, health insurance is a scheme of subsidized payment. Researchers have different opinion in defining and identifying 'health insurance'. It is identified as a form of social security to the poor (Devadarsan *et al.*, 2004). Mavalankar and Bhat (2000) say, when individual or group purchases in advance health coverage by paying a fee called "premium", it is identified as health insurance. However it is interesting to note the fact that any form of free service or subsidized payment for health care (i.e., medical benefits), provided by any organization (educational institutions) or employer (plantations, mining sector, railways, and defence sector) to the people involved in it, is a form of health insurance. Thus, the government implemented or private implemented programmes either compulsory or voluntary are not the only recognized health schemes.

Health insurance in India was first introduced in 1912 when the first Insurance Act was passed (Devadarsan *et al.*, 2004). In 1938, the current version of the Insurance Act was introduced; however since then fewer changes were made until 1972 when the insurance industry was nationalized and 107 private insurance companies were brought

under the umbrella of the General Insurance Corporation (GIC). Private and foreign entrepreneurs were allowed to enter the market with the enactment of the Insurance Regulatory and Development Act (IRDA) in 1999.

The specially financed health care delivery system by central and state governments opens up opportunities for the people at a minimal level, making accessibility to health care open for all, specially the low income groups and the needy. Most of these facilities are available free or at nominal charges for the entire population (Gupta, 2002). It is thus advisable not to comment that the government sector plays no major role in delivering accessible health care.

However, these facilities lack the type of quality required to deliver health care. They are mostly underfunded, understaffed, and runs short of medicines and allied supplies (Uplekar and George 1994). Hence the system suffers from inadequacy making the acceptors of health care to refrain from it, even from the minimal benefits. In the process the poor section of the population continues to suffer while the privileged section looks for other options other than the public health care. In terms of benefits, no section of the population is benefiting because the higher income section has to pay more and out-of-pocket to receive good health care and the poor continue to receive low quality care.

Full or small coverage health insurance exists in our country. Some are properly recognized and some remain unnoticed, only the schemes like ESIS, CGHS and Mediclaim are widely known. The employer managed schemes though consist majority of insured, they are however less recognized. There are various types of health coverage in India. Based on ownership the existing health insurance schemes are broadly divided into categories such as:

:

a) Government or State based systems (ex., ESIS and CGHS)
b) Market-based systems (private and voluntary- Mediclaim)
c) Employer provided insurance schemes (Railways, Armed Forces, defence)

d) Member organization based system (NGO or Cooperative; ex., ACCORD, RAHA, SEWA, VHS)

One study gives an approximate estimate of the ownership based insurance coverage in India. The Government or State based systems cover around 20-30 million population. While market based and employer managed facilities cover 2 million and 30 million population respectively. The NGO or Cooperative bodies cover around 5 per cent of the population (Mavalankar and Bhat, 2000).

3.2. Social Health Insurance

Social Health Insurance (SHI) is a form of financing and managing health care based on risk pooling. SHI pools both the health risks of the people on one hand, and the contributions of individuals, households, enterprises, and the government on the other. Thus, it protects people against financial and health burden and is a relatively fair method of financing health care (WHO, 2003). Social health insurance is being seen as one of the most promising option for extending health coverage to a majority of the population in a country (Gupta and Trivedi, 2004). Even for low income people who are employed in the formal sector, social insurance may be a better way of providing health protection. However, it is for the low-income people working in the unorganized sector and those below the poverty line that alternate approaches are needed. In recent years the concept of social health insurance is used for compulsory health insurance (Baru, 2002).

The World Health Organization (2003) further reports, Japan and the Republic of Korea are the countries in Asia, which have universal coverage of SHI, while lower middle income countries like Thailand and Philippines have a high proportion of SHI coverage. Developing countries with stronger economies like China, Indonesia, and India have lower population coverage through SHI schemes. SHI implementation depends on the level of socio-economic development, financial sector development (mainly banking) and, employment conditions, especially the existence of a larger proportion of formal

sector organized establishments. Countries with higher socio-economic status and a high employment ratio tend to have large SHI coverage.

However, there had been a lot of debate on defining 'social health insurance'. Gupta and Trivedi (2004) go further in their research to redefine the terminology. In their paper they discuss how WHO (2003) misinterprets all type of schemes as 'social health insurance'. However, the researchers define 'social insurance' as the Government run schemes and which is usually mandatory for certain groups in the population and the premiums are determined by income (and hence ability to pay) rather than related to health risk. Garg (2002) also identify all mandatory schemes as SHI.

In India it includes selected occupational groups like organized work force (ESI), defence, government employees (CGHS), railways, post and telegraph and mines among others. The Employees State Insurance Scheme (ESIS) and the Central Government Health Scheme (CGHS) are widely recognized in the social insurance sector. Table 3.1 gives an overview of the share of social health insurance in many low and middle income countries. In India only about 2 per cent of total health expenditure is funded by social health insurance while 18 per cent is funded by government budget.

Table 3.1

Percentage of total health expenditure funded through public or social health insurance and direct government revenue

COUNTRY	Social Health Insurance	Government Budget
BOLIVIA	20	33
KOREA	23	10
CHINA	31	13
ALGERIA	37	36
VIETNAM	2	20
INDIA	2	**18**

Source: Naylor *et al.*, 1999

3.3. Role of IRDA and TPA

The government has established Insurance Regulatory and Development Authority (IRDA) which is the statutory body for regulation of the whole insurance industry. They grant licenses to private companies and regulate the insurance business. The role of IRDA is important because they have to ensure that the insurance sector develops rapidly and the benefit of the insurance goes to the consumers. But it has to guard against the ill effects of private insurance since they usually tend to cover middle class who can afford to pay high premiums. Unregulated reimbursement of medical costs by the insurance companies will push up the prices of private care. So, large section of India's population, who are not insured, will be at a relative disadvantage as they will, in future, have to pay much more for the private care. Thus checking increase in the costs of medical care will be a very important role of the IRDA. The role of IRDA can be stated as, (a) to provide protection of consumer's interest, (b) to ensure financial soundness of the insurance sector and (c) to ensure healthy growth of insurance market (Mavalankar and Bhat, 2000; Gupta *et al.*, 2002; Bir, 2006).

Another development that took place in the insurance sector is the emergence of Third Party Administrators (TPA). The TPAs were introduced as intermediaries to facilitate claims settlements between the insurer and the insured and the health service provider, since insurance companies have been searching for means to get their management expenses in line. TPA was introduced to make cashless transactions to the customer at the time of service delivery. The TPA concept was introduced in 2000, but got statutory recognition in 2001 with the notification of IRDA.

3.4. Government or State Based Schemes

The government owes its responsibility to provide health care facilities to its people. The government has been unsuccessful in providing satisfactory health securities to its people. However in the health insurance sector, it plays a major role of providing the largest insurance organizations. The Employees State Insurance Scheme (ESIS) and

Central Government Health Scheme (CGHS) are the major acting schemes for the people involved in the industrial sector and the central and state governments.

3.4.1 Employees State Insurance Scheme (ESIS)

This has been established under the Employees State Insurance (ESI) Act of 1948 with the support of state government employers and employees. This scheme provides protection to employees against loss of wages due to inability to work due to sickness, maternity, disability and death due to injury. The scheme was launched as a compulsory social security benefit to workers in the industrial sector. It offers medical and cash benefits, preventive and promotive care and health education. Medical care is also provided to employees and their family members without fee for service. Originally, the ESIS scheme covered all power-using non-seasonal factories employing 10 or more people. Later, it was extended to cover employees working in all non-power using factories with 20 or more persons. While persons working in mines and plantations, or an organization offering health benefits as good as or better than ESIS, are specifically excluded.

The monthly wage limit for enrolment in the ESIS has been raised from Rs. 3500 to Rs. 6500, with a prepayment contribution in the form of a payroll tax of 1.75per cent by employees, 4.75per cent of employees' wages to be paid by the employers, and 12.5per cent of the total expenses are borne by the state governments. When implemented for the first time in India at two centres namely Delhi and Kanpur simultaneously in February 1952, it covered about 1.2 lakh employees. Presently the scheme is spread over 22 states and Union territories across India covering 91lakh employees and more than 350 lakh beneficiaries.

Service establishments like shops, hotels, restaurants, cinema houses, road transport and news papers are now covered. Medical benefits comprise cash payment for sickness, maternity, temporary or permanent disablement, survivorship and funeral expenses. Preventive services include immunization, maternal and child health, family welfare

services. Promotive services include health education and health check-up camps. Curative services include: dispensary care, hospital care, maternity care, supportive services including diagnostic centre, drugs, dressings, surgical procedures, dental care, prosthesis and other appliances. Rehabilitative services include: physical rehabilitation, economical rehabilitation, and provision of artificial aids (social, psychological rehabilitation).

The scheme is managed and financed by the Employees State Insurance Corporation (a public undertaking) through the state governments, with total expenditure of Rs 3300 million or Rs 400/- per capita insured person.

Table3.2

Coverage under the Employees State Insurance Scheme (ESIS) over the years

YEAR	Employees Covered (Million)	Beneficiaries (Million)
1995	6.79	29.35
1996	6.61	28.33
1997	7.73	32.76
1998	8.36	35.29
1999	8.81	34.21
2000	8.60	33.37
2001	8.49	32.95
2002	8.00	31.05
2003	7.82	30.37
2004	7.91	30.70
2005	8.49	32.97

Source: Health Information of India, MOHFW, 2005

The number of beneficiaries is over 30 million spread over 687 ESI centres across states. Under the ESIS, there were 142 hospitals and 1 447 dispensaries with over 23 000 beds till the year 2003 (ESI, Annual Reports, 2003). The above table shows that the coverage of the employees increased from 1995 till 1999, along with beneficiaries but

from the year 2000, both in terms of employee's coverage under the scheme and beneficiaries started to decline and again from 2005, the coverage of the employees and beneficiaries has increased.

The ESIS programme is however criticized on several grounds by researchers. The survey conducted in Gujarat revealed that ESIS services are not successful in terms of quality. The ESIS services suffer from, low quality drugs, long waiting periods, impudent behaviour of personnel, lack of interest or low interest on part of employees and low awareness of ESI procedures (Shariff, 1994). Gopinath and Krishna's (2004) study on Delhi also points out to the quality problem and weak cash management. Gumber (2002) points out to the issue of coverage related to equity. There is higher share of expenditure on ESIS in those states which are better placed in terms of development and have higher share of organized sector. Bhat and Mavalankar (2000) point out some extra set of problems in the scheme. Some of them are unsatisfactory management information system, there is duality of control, rising costs in super specialty treatment, and in rural area the access to services is also a problem. Bir's (2006) observations notice, the misuse of leave and cash benefits.

3.4.2 Central Government Health Scheme (CGHS)

The Scheme was introduced in the year 1954 as a contributory plan and aimed to provide comprehensive medical care to central government employees (both in service and retired) and their families. This scheme was designed to replace the cumbersome and expensive system of reimbursements. The benefits offered include all outpatient facilities, and preventive and promotive care in dispensaries. Separate dispensaries are maintained for exclusive use of central government workers. Inpatient facilities in government hospitals and approved private hospitals are also covered. This scheme is mainly funded through Central Government funds, with premiums ranging from Rs 15 to Rs 150 per month based on salary scales. The coverage of this scheme has grown substantially with provision for the non-allopathic systems of medicine as well as for allopathy. Beneficiaries at this moment are around 432 000, spread across 22 cities.

Under this scheme, the health care services that are covered are supply of medicines, laboratory and X-Ray investigations, emergency treatment, antenatal care, postnatal care, advice on family welfare, and specialist's consultations. Besides providing medical services, CGHS provides reimbursement for out-of-pocket expenditure for availing of treatment in government hospitals and approved private facilities (CGHS, 2003).

The scheme relies exclusively on central government outlays. In CGHS, the contribution of the employees is less than the government budget. The real outlay on health care has been declining due to the structural adjustment problems and inefficient measures by the government (Bir, 2006).

Table 3.3

Coverage under Central Government Health Scheme (CSHS) over the years in India

YEAR	CGHS Dispensaries	Families Covered (In Lakhs)	Beneficiaries (In Lakhs)
1990	314	8.5	38.3
1997	320	9.3	42.4
2003	323	10.0	43.0

Source: Health Information of India, MOHFW, 2003

The CGHS is also criticized on the similar grounds like the ESIS. A study by the NCAER (1993) on public hospitals in Delhi highlights the problems. The CGHS suffers from quality and accessibility problem. Subscribers have complained of high out-of-pocket expenses due to slow reimbursement and incomplete coverage for private health care (as only 80per cent of cost is reimbursed if referral is made to private facility when such facilities are not available with the CGHS), and long waiting time. Since CGHS services are confined to regular government employees, the better-off section is enjoying the benefits among the covered population under the scheme.

3.5. Employer Managed Facilities

Any medical benefit that is offered by the employer or by any organization to their employees are the employer managed facilities. These health insurance schemes are offered usually for public and private sector employees and an organized sector management. Government provides direct health care services for employees of a large number of state-owned departments such as the Railways and Defence and Police services. These departments have set up their own system of dispensaries, hospitals and personnel and the services are provided free of charge. Some educational institutions offer free treatment or treatment on subsidized payment to their employees and to people involved in it.

Employer managed facilities also include the medical benefits along with the reimbursement of medical expenses. The private sector provides reimbursement plans to its employees as part of medical expenses. In addition to ESIS and other health insurance schemes, many private sector companies reimburse medical expenses. The kinds of reimbursement that are common are: (a) medical grant which is provided by the employers as medical allowance to their employees, which actually forms certain per cent share of the employee's income (the limits of this kind of reimbursement depends upon the employee's salary) and (b) employees submit claims to their employers for reimbursement in case of medical expenses, and in such case reimbursements are not linked to the individual's contribution (Ellis *et al.*, 2000 and Gumber, 2002).

These bodies of organizations render huge contribution towards health care financing. They supposedly comprise one of the largest bodies which enhance health care financing at present and will continue in the future. However, their area of operation is the organized sector. Employer managed facilities also have some limitations, a field which is yet to be studied.

3.6. Market Based Schemes

Other than the mandatory schemes like ESIS and CGHS, there are some voluntary schemes which are available and operated through market. Each of these individual schemes operates independently with its own policies. They are available to individuals who wish to pay the amount of premium that pools people with similar risks and insures them for health expenses. Premiums are based on an assessment of the risk status of the consumer (or of the group of employees) and the level of benefits provided, rather than as a proportion of the consumer's income. They are also concentrated in the organized sector and are common to urban households. The most common scheme in the market is the 'Mediclaim' policy introduced by the General Insurance Corporation (GIC). The other market based schemes that have been introduced are by the Life Insurance Corporation (LIC).

3.6.1 Mediclaim

The mediclaim scheme is run by the General Insurance Corporation (GIC), a public sector undertaking. The GIC along with its four subsidiaries National Insurance Corporation, New India Assurance Company, Oriental Insurance Company and United Insurance Company offer mediclaim plan in the market. All these four companies operate nationally and are controlled by GIC. The GIC was set up in 1973 as a reinsurance company but it introduced the scheme in 1986. The merger of the various private insurance companies has made the provision of medical benefits easier.

Of the various schemes offered, Mediclaim is the main product of the GIC. Mediclaim covers individuals and groups with persons aged 5 – 80 yrs. Children (3 months – 5 yrs) are covered with their parents. After modification of the policy in 1996, the policy allowed differential premium for six age-groups: 5-45, 46-55, 56-65, 66-70, 71-75 and 76 plus. The other revisions that were made in the scheme were: (a) the sum insured was raised from Rs.83,000 to Rs.300,000; (b) rate of premium was reduced to

half of the previous rate in the higher categories of sum insured. The policy is for both individuals and families. This scheme provides for reimbursement of medical expenses (now offers cashless scheme) by an individual towards hospitalization and domiciliary hospitalization as per the sum insured. The out-of-pocket payment is reimbursed. Premiums are calculated based on age and the sum insured, which in turn varies from Rs 15,000 to Rs 500,000. The Coverage of the scheme is provided in the following table:

Table 3.4

Mediclaim Coverage over the years in India

YEAR	Number of Persons Covered (million)
1990-91	0.56
1995-96	1.66
2002-03	2.50

Source: Cited in Ellis *et al.*, (2000) and Bir (2006)

Though the response to the scheme is positive, unlike ESIS, the scheme is subjected to numerous exclusions, pre-existing disease clauses, coverage limits and restrictions on eligibility. It does not cover outpatient treatments and the premium amount is high in relation to the claim payments. According to a study on the mediclaim users, it is known that in cases, the medical spending claim was disallowed or partially reimbursed (Ellis *et al.*, 2000).

Another scheme, namely the **Jan Arogya Bima** policy introduced by GIC in 1996, specifically targets the middle and lower income groups. It also covers reimbursement of hospitalization costs up to Rs.5000 annually in a year. The annual premium ranges between Rs.70 and Rs.140 by age. The most distinct feature of the scheme is it includes maternity expenses. The same exclusion mechanisms apply for this scheme as those under the Mediclaim policy. A family discount of 30per cent is granted, but there is no group discount or agent commission. However, like the Mediclaim, this policy too has had only limited success. The Jan Arogya Bima Scheme had covered only 400,000 individuals by 1997.

3.6.2 Other Specialized Schemes:

Life Insurance Corporation (LIC): Life Insurance Corporation of India introduced 'Asha Deep' policy in 1995, which covers four dreaded diseases – cancer, paralysis, dialysis and heart diseases for individuals between 18-50 years. By and large it is very limited in scope and therefore does not serve to reduce the risk of financial burdens to any significant extent.

LIC recently launched a health scheme, to protect families from sky rocketing medical expenses. The scheme named 'LIC's Health Protection Plus' aims to cover entire family (husband, wife and the children) and includes Hospital Cash Benefit (HCB) and Major Surgical Benefit (MSB). The amount of premium to be paid annually is Rs.12000 for a period of 30 years (LIC of India, 2009).

Bajaj Alliance: Covers health packages like 'Health Guard', 'Hospital Cash', 'Critical Illness', 'Personal Guard', 'Star Package', 'Silver Health' etc., for individual and family. The packages provides cash allowance of Rs. 500-2500 for each day of hospitalization, and covers medical benefits upto 10 lakhs. Ten major diseases are covered; cancer, heart attack, paralysis, stroke, major organ transplant etc. The premium rates vary under each package and each age group covered (See Appendix: Table 1 and 2) (The Bajaj Alliance Lt. Company, 2009).

The New India Assurance Company Limited: New India offers policies like 'Janata Mediclaim Policy' and 'Family Floater Mediclaim Policy'. The schemes cover various types of illness and their hospitalization charges vary from Rs.450 to Rs.36000 under each specified illness (The New India Assurance Company Limited, 2009).

The Oriental Insurance Company Limited: Along with individual and group mediclaim policy, it has announced 'Happy Family Floater Policy' which has coverage under two options: SILVER and GOLD covers. SILVER offers 1 to 5 lakhs of coverage

and GOLD offers an insured sum of 6 to 10 lakhs. The policy mainly covers the hospitalization expenses for the covered diseases or accident upto specific limits. The premium rates vary among the age group under amount covered and each option. The premium amount increases with increasing age. The premium is high for the older age group, above 60 years (See Appendix: Table 3.A, 3.B, 3.C, 4.A, 4.B and 4.C) (The Oriental Insurance Company Limited, 2009).

There are other private insurance companies like ICICI Lombard, TATA AIG who also offer health coverage schemes.

3.7. Community Health Financing

The 'Community Health Financing' schemes are run by Non-governmental organizations (NGO). The NGO's run and operate on non-profit basis for urban poor and rural people; and people who are involved in the unorganized sector. These organizations rely on finances from various sources, including government, donor agencies and community and self-generated sources. The poor and workers in unorganized sector receive little or no social security and are thus deprived from the minimum medical benefits (Kuruvilla *et al.*, 2005). The need for community health financing has arisen to protect the poor from indebtedness and impoverishment resulting from medical expenditures. Community Health Insurance (CHI) schemes involve prepayment and the pooling of resources to cover the costs of health-related events (Devadasan *et al.*, 2004). The need for security is further increased because the poor are the most vulnerable for ill health, accidents, death, desertion, social disruptions such as riots, loss of housing, job and other means of livelihood (Mavalankar and Bhat, 2000; Ahuja, 2004).

The study by Gupta and Trivedi (2004) based on the World Bank 2001 report, notes that about 24 percent of the poorest quintile do not seek care, compared to 9 percent of the richest quintile. And in case of the total illness episodes treated during the last 15 days, the poorest 20 percent obtained treatment three times less than the richest 20 percent.

Hence, the need to extend health coverage events by these schemes to the population especially the poor is felt.

Under Community Based Health Insurance (CBHI) schemes membership is voluntary rather than mandatory. In India small and big NGO's like Tribhuvandas, SEWA, ACCORD etc. have implemented the insurance schemes. The range of services provided by the organizations varies from one organization to another. There are schemes for farmers (MGIMS, Yeshasvini, Buldhana, VHS); for dalits (Navsarjan Trust); for the tribal population (ACCORD, Karuna Trust, RAHA), women from self help groups (BAIF, DHAN) and poor self-employed women (SEWA) working for the poor in the rural and semi-urban areas (Devadasan *et al.*, 2004).

It is estimated that about 5 million people are covered under various NGO insurance schemes (Mavalankar and Bhat, 2000). Ellis *et al.*, (2000) estimates the total coverage to be about 30 million. The coverage of these schemes varies and most use their own health workers to provide primary care and have tied up with a hospital to provide secondary care. Premiums are low, generally fixed and not related to risk. Most schemes have limited coverage and some also provide wider services besides health and treatment.

3.8. Summary

In any country, social health insurance is recognized as an important source of heath care financing. In India, this type of health scheme is available in form of Employees State Insurance Scheme (ESIS) and Central Government Health Scheme (CGHS). The employees and their families under the state and central government are benefited from these schemes, thus covering a vast section of population (Table 3.2 and Table 3.3). Though they are highly recognized form of health financing, they are criticized by researchers on several grounds; regarding their poor coverage, exclusion of a number of deadly diseases in the coverage; and limitations within the accepted schemes, poor quality services, accessibility problem etc.

The other types of schemes available are provided by employers (mining sector, defence, educational institutes), which are assumed to be covering maximum number of population; and non-governmental organizations. Nor these are properly recognized nor are they tapped. Thus, resulting into poor counting of health coverage in the country. While the market based schemes (Mediclaim) have appeared to capture the health insurance market, they are still not valuable to people for their profit-based and other limitations. Thus the potential of health coverage is misunderstood and misinterpreted.

Health insurance seeks many problems. The most common problems that arise from health insurance as termed by economists are 'moral hazard[2]' and 'adverse selection[3]'. The TPA controls the problem of 'moral hazard' by regulating the excess medical bills produced by the consumers. Since the awareness level among the people is very low, in most of the cases the consumers do not go through the policy rules thoroughly, resulting into over utilization of services and non-payment of the claims by the insurers. This further leads to losing of scheme coverage, withdrawal and negative response from the consumers.

[2] The demand for medical care and costs of care increases when one has health insurance (Garg, 2002; Bir, 2006).

[3] Persons with higher expected health expenditure are more likely to purchase insurance than those with lower expected health expenditures; a situation where only the sick buy insurance.

CHAPTER – 4

HEALTH INSURANCE SCENARIO IN INDIA

4.1. The National Picture

Health insurance has been widely recognized as one of the promising solutions for health care financing and thus health insurance coverage dominates health care discussions. Health insurance coverage includes not only the private provisions, but also the free public provisions or community financing, conventional insurance and all sorts of reimbursement schemes that are provided by the employer. In fact any arrangement that makes the consumers to avoid, delay or reduce full payment is a form of 'insurance' (Ellis *et al.*, 2002). In India where such options exist, the extent of health insurance 'coverage' should be vast. However, statistics reveal that coverage is quite weak in India and is primarily placed in the organized sector in India. One estimate shows that only 10 per cent of health insurance market has been tapped till today (Garg, 2000; Mavalankar and Bhat, 2000; Gupta and Trivedi, 2004). The researchers see some scope in the insurance market which would rise up to 35 per cent in the future, since there is also a rise in the health care demand in India.

Table 4.1

Percentage of Households, where at least one usual member is covered by any Health Scheme or Health Insurance, India, 2005-06

Region	Percentage of Households covered by a health scheme or health insurance[1]	Number of Households
INDIA	**4.9**	**109,041**
URBAN	10.4	35,579
RURAL	2.2	73,462

[1] At least one usual member is covered by a health scheme or health insurance

Source: Computed from Household data file, NFHS-III, 2005-06

The National Family Health Survey (NFHS-III) for the year 2005-06 in India closely supports Mavalankar and Bhat's (2000) statistics on health insurance coverage. The NFHS-III results for India show that only 4.9 per cent out of the 1.09 lakh sample households, where at least one usual member is covered by a health scheme or health insurance. The coverage in urban and rural areas is around 10.4 per cent and 2.2 per cent respectively as evident from Table 4.1.

Table 4.2

Percentage distribution of type of Health Scheme or Health Insurance covered by the Households, India, 2005-06

HEALTH SCHEME OR HEALTH INSURANCE	Percent of households insured by the scheme in India	Number of households in the sample insured by the scheme in India	Percent of households insured by the scheme in Urban areas	Number of households in the sample insured by the scheme in urban areas
ESIS[1]	1.3	1394	3.0	1067
CGHS[2]	1.0	1077	2.2	789
CHIP[3]	0.3	287	0.3	92
OHITE[4]	0.3	317	0.7	231
MRFE[5]	0.6	620	1.3	477
OPPCHI[6]	1.3	1467	2.8	1007
Other	0.2	237	0.3	98
TOTAL	**4.9**	**5343**	**10.4**	**3704**

[1] Employees State Insurance Scheme
[2] Central Government Health Scheme
[3] Community Health Insurance Programme
[4] Other Health Insurance Through Employer
[5] Medical Reimbursement Through Employer
[6] Other Privately Purchased Common Health Insurance

Source: Computed from Household data file, NFHS-III, 2005-06

The coverage by various types of schemes is shown in Table 4.2. In India, privately purchased schemes (1.3 per cent) and the Employees State Insurance Scheme (ESIS) 1.3 per cent, are more commonly accessed. The rest of the households are either insured with Central Government Health Scheme (CGHS), 1 percent, or received insurance and reimbursed through the employer (0.9 per cent), while rest of the population is covered

under Non-Governmental Organization (NGO) or community health insurance funded schemes (0.3 per cent). The Community funded schemes along with the 'other' type schemes or the non-specified schemes are poorly placed in the country. The community health insurance schemes mainly operate in the rural areas and for the urban poor. They play a major role in reaching out the poor, because all other schemes are profit based and are for the organized sector and recognized employees mainly.

Urban India is well placed as compared to the national picture, which is due to the weak coverage in the rural areas. In terms of coverage in urban areas the ESIS is leading, followed by privately purchased scheme (2.8 per cent), CGHS (2.2 per cent), and the rest follows the same order, as in case of India (Table 4.2). Though ESIS and CGHS schemes run with a number of drawbacks, that is, criticized for their poor quality services and inefficiency, they still hold a dominant position in the health market of urban India, where people have more options to purchase good schemes. This accounts for the fact that people are less aware of the voluntary schemes available in the market, or are not willing to purchase them because of number of complexities.

ESIS and CGHS together account to 5.2 per cent. Thus, overall the estimate shows that government contribution in the health insurance market is higher than any other organization. The employer managed schemes together account to 2 per cent of coverage, which is also an important form of health insurance. It is managed both through public and private bodies. These are one of the widest set of bodies which provide the maximum coverage for medical benefits (Mavalankar and Bhat, 2000). The percentage of population covered under such schemes is less but in reality most of the medical benefits that are offered through employers are not recognized and tapped. They are not marked as 'health insurance' but marked as 'simple medical benefits'.

It is thus evident from the data (Table 4.2), that the Government sector plays a major role in the health care funding in the form of health security. The picture we get from the annual plan outlay of India is that private funding plays a dominant role in health care expenditure, but in the insurance sector, the government body seems to be

playing a significant role with most of the coverage, along with the private sector, followed by employer contribution.

4.2. Inter-State Variations

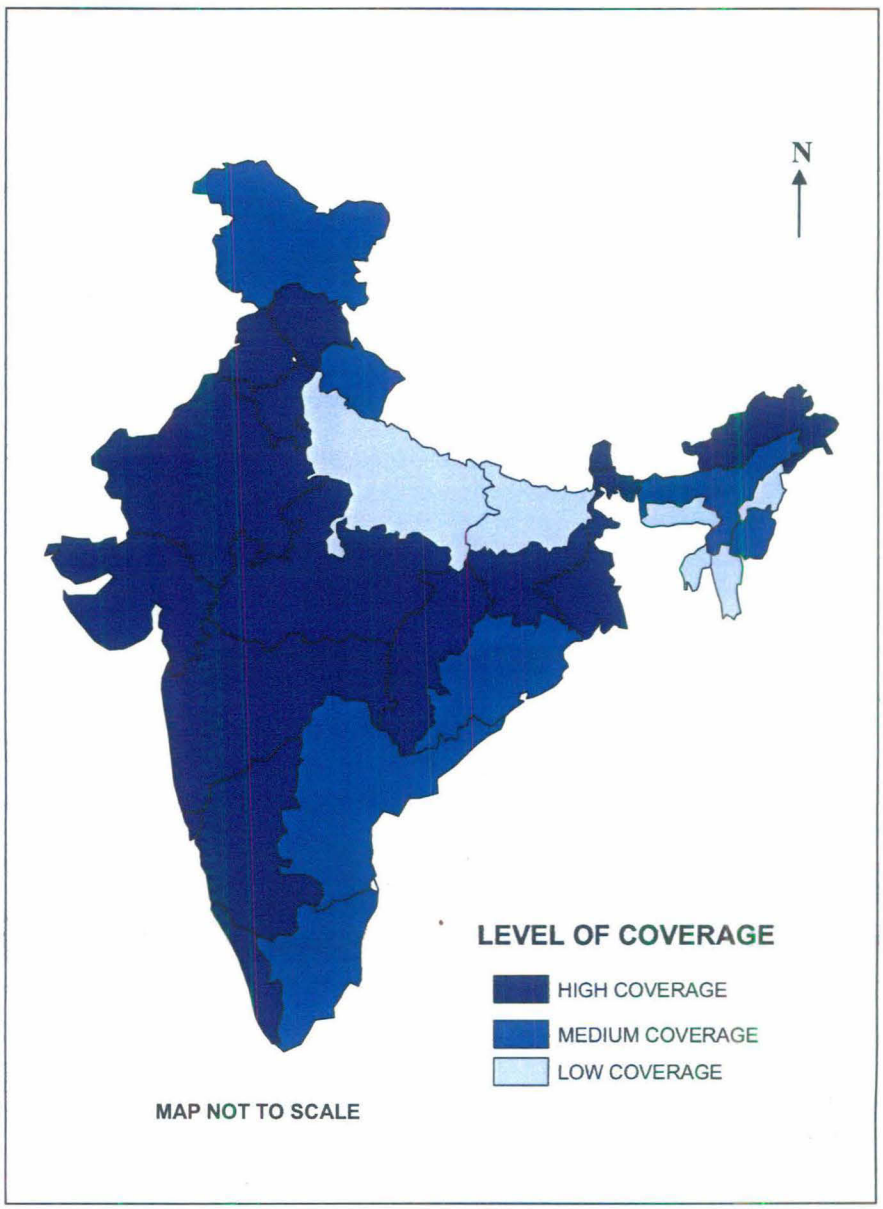
A brief overview of the coverage situation of health insurance in India at the national level was discussed in the previous section. To understand the coverage pattern at the state level is important and thus an effort has been made. Since the study focuses mainly on urban India, the inter-state variation at the national level has been presented for the urban areas as well.

4.2.1. *State level variation in case of India*

Delhi stands out as the highest health insurance coverage state with 13.9 per cent of coverage, while Meghalaya among the lowest (0.7 per cent). Almost half of the states have coverage below the country average (4.9 per cent). States namely, Gujarat (10.4 per cent), Karnataka (10.5 per cent) and Goa (11.2 per cent) are the states with higher coverage, followed by Kerala (8.9 per cent), Maharashtra (7.2 per cent), Uttaranchal and Punjab (6.7 per cent respectively), Haryana (6.6 per cent) and West Bengal (6 per cent).

The lowest coverage is in the states of Meghalaya (0.7 per cent), Bihar (0.9 per cent), Tripura (1.0 per cent), and Uttar Pradesh (1.3 per cent). Almost all the states in North-central India have low coverage and below national level. Some developed states like Tamil Nadu (3.9 per cent) and Andhra Pradesh (3.6 per cent) also have coverage below the national average (4.9 per cent).

Map 4.1
Percentage of Households Covered by Health Insurance
Urban India, 2005-06



Source: Table 4.3

Table 4.3

Percentage of Households, where at least one usual member is covered by any Health Scheme or Health Insurance across states in ascending order, India, 2005-06

INDIA STATES	Percentage Households Insured	URBAN INDIA STATES	Percentage Households Insured
		LOW COVERAGE	
Meghalaya	0.7	Meghalaya	1.4
Bihar	0.9	Nagaland	(2.2)
Tripura	1.0	Bihar	2.6
Uttar Pradesh	1.3	Tripura	2.8
Orissa	1.7	Uttar Pradesh	3.3
Nagaland	1.8	Mizoram	3.9
		MEDIUM COVERAGE	
Mizoram	2.1	Assam	6.5
Assam	2.3	Tamil Nadu	7.0
Chhattisgarh	3.2	Andhra Pradesh	7.3
Andhra Pradesh	3.6	Orissa	7.6
Tamil Nadu	3.9	Uttaranchal	9.4
Rajasthan	4.4	Jammu & Kashmir	9.7
Jharkhand	4.6	Manipur	10.4
Madhya Pradesh	4.7	*URBAN INDIA*	10.4
		HIGH COVERAGE	
INDIA	4.9	Himachal Pradesh	10.9
Jammu & Kashmir	5.2	Rajasthan	11.1
Himachal Pradesh	5.7	Kerala	11.2
West Bengal	6.0	Chhattisgarh	11.8
Haryana	6.6	Karnataka	11.8
Manipur	6.6	Punjab	11.8
Arunachal Pradesh	6.7	Arunachal Pradesh	(12.1)
Punjab	6.7	Maharashtra	12.2
Uttaranchal	6.7	Jharkhand	13.1
Maharashtra	7.2	Goa	13.6
Sikkim	7.2	Delhi	13.9
Kerala	8.9	Madhya Pradesh	13.9
Gujarat	10.4	Sikkim	(14.2)
Karnataka	10.5	Haryana	15.1
Goa	11.2	West Bengal	15.6
Delhi	13.9	Gujarat	17.7

( ) sample size is less than 50

Source: Computed from Household data file, NFHS-III, 2005-06

4.2.2. State level variation in case of Urban India

The coverage in urban India is far better than the national average. As compared to the national average, the urban India average is larger, around 10.4 per cent. While broadly dividing the states according to their levels of coverage, the trends and patterns of coverage could be clearly figured out. The states with low and medium coverage are positioned below the urban average.

The remarkable change that can be noticed in urban India is that few states that had below national level coverage are now well placed. Rajasthan, Chhattisgarh, Jharkhand and Madhya Pradesh are positioned above the urban average (10.4 per cent), while few states that were positioned above the national average lie below urban average. Uttaranchal, Jammu & Kashmir and Manipur are such states. Around sixteen states are above the urban average, with Gujarat having the highest coverage of 17.7 per cent, followed by West Bengal (15.6 per cent) and Haryana (15.1 per cent).

However, coverage is weak in most of the states, and thus only a few states stand out as separate entity of at least some minimum coverage (Map 4.1). This includes Gujarat (17.7 per cent), West Bengal (15.6 per cent), Haryana (15.1 per cent), Madhya Pradesh (13.9 per cent), Delhi (13.9 per cent), Jharkhand (13.1 per cent), Maharashtra (12.2 per cent), Punjab (11.8 per cent), Karnataka (11.8 per cent), Kerala (11.2 per cent), Rajasthan (11.1 per cent), Orissa (7.6 per cent), Andhra Pradesh (7.3 per cent), Tamil Nadu (7.0 per cent), Uttar Pradesh (3.3 per cent).

Table 4.4

Percentage of Households covered by type of Health Scheme or Health Insurance in urban areas of different states of India, arranged in ascending order of coverage, 2005-06

		Percentage share of various schemes						
STATES	Total Percentage of Households Insured	ESIS	CGHS	CHIP	OHITE	MRFE	OPPCHI	Other
Uttar Pradesh	3.3	37.3*	25.2	NI	7.9	7.9	22.8	0.8
Tamil Nadu	7.0	27.0	38.4*	0.4	7.7	13.6	12.7	NI
Andhra Pradesh	7.3	45.1*	13.0	0.5	4.2	24.7	18.2	1.4
Orissa	7.6	22.0	7.8	2.0	24.0	34.0*	13.7	2.0
Rajasthan	11.1	48.9*	21.4	NI	6.4	7.0	16.6	0.5
Kerala	11.2	14.9	13.2	5.3	4.4	12.3	47.8*	4.4
Karnataka	11.8	21.3	9.8	18.2	9.8	6.1	32.0*	11.1
Punjab	11.8	50.0*	19.0	0.9	6.0	10.3	13.8	2.6
Maharashtra	12.2	17.7	20.9	1.3	7.6	12.9	41.2*	1.4
Jharkhand	13.1	60.5*	18.6	NI	2.3	10.5	8.1	NI
Delhi	13.9	17.5	22.0	1.7	8.5	13.0	39.5*	1.7
Madhya Pradesh	13.9	21.5	40.4*	2.3	2.3	22.7	12.9	NI
Haryana	15.1	24.4	28.6*	1.1	2.2	19.8	23.1	3.3
West Bengal	15.6	37.3*	17.0	0.9	5.3	12.8	24.3	4.6
Gujarat	17.7	20.2	24.0	0.8	3.8	8.7	43.0*	2.0
TOTAL	10.4	29.2	21.6	2.5	6.3	13.1	27.6	2.6

NI = No Insurance

* Schemes with highest coverage in the respective states

See Table 4.2 for abbreviations

Source: Computed from Household data file, NFHS-III, 2005-06

Though health insurance coverage in urban India is better than in rural areas, yet it is far from satisfactory. Table 4.4 shows the distribution of each type of schemes across states. The state with low coverage have reported the higher share of coverage with the Government owned schemes like Employees State Insurance Scheme (ESIS) and the Central Government Health Schemes (CGHS). In Uttar Pradesh such trend is clearly visible. The states categorized as 'medium levels of coverage' show little difference in the distribution pattern of the schemes. There is a shift from Government owned schemes to reimbursement schemes through employer and privately purchased. 'High coverage

states' have shown mixed results with maximum states covered under government owned schemes, followed by privately purchased schemes mainly. Only Kerala, Karnataka, Maharashtra, Delhi and Gujarat show higher acceptance for privately purchased schemes with 47.8 per cent, 32 per cent, and 41.2 per cent, 39.5 per cent and 43 per cent respectively. Uttar Pradesh which has the lowest coverage (3.3 per cent) is dominated by the ESIS, while Gujarat (17.7 per cent) with the highest coverage has a large share of the privately purchased schemes.

4.3. Socio-Economic Differentials

Health insurance coverage is further distinct with differential socio-economic determinants. Societal hierarchy marks out major differences among the population. Coverage of the scheme is expected to vary with varying socio-economic background. The section of population which stands at the bottom of the hierarchy (example: the low educated people, the religious and caste minorities, and the low wealth quintile population) are expected to show very low coverage. The following section brings out the coverage rate among the different socio-economic groups.

Higher coverage is reported in households with higher education[4] (20.1 per cent), other religious groups (15.2 per cent) followed by Christians with 11.7 per cent, and other caste group (14.1 percent). These percentages are higher than the urban average (10.4 per cent).

The highest wealth quintile households also have coverage (17.9 per cent) higher than the urban average. Among households in the lowest three wealth quintiles, the proportion having a household member with health insurance does not exceed 3 percent. The data clearly highlight the poor health insurance coverage, a situation urgently requiring remedial steps.

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[4] The households categorized by the education level of the household members above the age of 21 years with the highest education.

Table- 4.5

Percentage Distribution of Insured Households by Type of Health Schemes or Health Insurance, according to background characteristics, Urban India, 2005-06

		Percentage distribution of insured households						
Background Characteristics	Total Percentage of Households Insured	ESIS	CGHS	CHIP	OHITE	MRFE	OPPCHI	Other
Type of Education								
Illiterate	**2.5**	62.0	12.8	2.7	2.7	4.5	15.5	3.7
Primary	**2.6**	54.3	7.6	2.1	3.2	10.9	21.9	1.0
Secondary	**7.8**	35.0	21.7	3.1	6.1	11.3	22.5	2.1
Higher	**20.1**	23.0	22.5	2.1	6.7	14.6	31.2	3.0
Type of Religion								
Hindu	**11.4**	29.4	21.8	2.6	6.4	13.1	27.1	2.5
Muslim	**3.6**	37	19.3	0.5	4.9	6.6	28.7	3.8
Christian	**11.7**	21.9	21.9	0.7	11	17.1	27.2	5.5
Others	**15.2**	24.6	20.4	3.7	2.6	15.2	33.5	2.1
Type of Caste								
Others	**14.1**	24.5	21.5	2.1	5.9	13.6	32.3	2.8
SC	**8.3**	44.3	25.6	2.5	4.9	13.1	12.1	2.1
ST	**10.8**	23.9	29.1	0.9	9.1	16.4	20.0	1.8
OBC	**7.4**	32.7	19.5	3.6	7.7	11.5	24.8	2.9
Wealth Index								
Poorest	**(0.4)**	40	NI	20	50	NI	NI	0
Poorer	**(1.1)**	40	8.3	8	8.3	12	20	0
Middle	**2.7**	53.7	7.4	7.4	8.1	6.6	13.3	3.7
Richer	**5.2**	47.2	14.3	3.9	6.2	11.4	17.1	2.2
Richest	**18.0**	24.7	23.6	1.9	6.1	13.6	30.1	2.7
TOTAL	**10.4**	**29.1**	**21.5**	**2.5**	**6.3**	**13.0**	**27.5**	**2.7**

( ) sample size is less than 50
NI = No Insurance
See Table 4.2 for abbreviations
Source: Computed from Household data file, NFHS-III, 2005-06

With different background characteristics, ESIS is the most accessed health scheme ranging from 20 per cent to 60 per cent coverage, followed by privately purchased schemes. Government owned schemes are mostly dominant in the households of scheduled castes and scheduled tribes. On the other hand, Christian and other religious groups, 'other' caste group and highest quintile households' use privately purchased

schemes followed by ESIS and CGHS. This clearly indicates the well advanced section is only capable of accessing private insurance (Table 4.5).

Table 4.6

Percentage of Households with any health insurance by Levels of Education across different regions in Urban India, 2005-06

STATES	Educational level of the household *				Total Insured
	ILLITERATE	PRIMARY	SECONDARY	HIGHER	
Punjab	4.2	5	9.5	20.3	11.8
Uttaranchal	(3.4)	(4.7)	8	13.3	9.4
Haryana	6.2	(NI)	14	23.4	15.1
Delhi	4.6	6.1	9.1	22.1	13.9
Rajasthan	1.3	1.6	4.6	25.3	11.1
Uttar Pradesh	0.9	NI	1.5	8.8	3.3
Bihar	0.3	1.0	1.2	6.7	2.6
Assam	1.8	NI	4.8	13.5	6.5
West Bengal	7.4	6.4	13.0	26.5	15.6
Jharkhand	5.9	3.7	12.2	19.3	13.1
Orissa	4.7	2.8	8.0	10.5	7.6
Chhattisgarh	9.6	5.1	12.6	14.4	11.8
Madhya Pradesh	NI	2.5	9.9	27.7	13.9
Gujarat	1.2	4.6	13.5	37.2	17.7
Maharashtra	2.0	2.2	8.6	21.7	12.2
Andhra Pradesh	4.1	2.7	4.8	17.1	7.3
Karnataka	2.6	2.9	9.1	21.0	11.8
Kerala	(NI)	5.0	7.5	19.5	11.2
Tamil Nadu	NI	0.2	5.3	17	7
TOTAL	2.5	2.6	7.8	20.1	10.4

( ) sample size is less than 50.

States with sample size less than 50 in all levels of education have not been included in the analysis

NI = No Insurance

* Highest level of education by any member of age 21 or higher

Source: Computed from Household data file, NFHS-III, 2005-06

4.3.1. Socio-economic differentials within the states

State-wise coverage rate among different socio-economic groups is studied to get a clear picture of the regional differences.

State-wise coverage rate among different Educated Groups:

Low coverage states: Many states report poor coverage by levels of education (Table 4.6). Coverage rate is lower than the national urban averages for the respective educational group.

Medium coverage states: Not much significant coverage is seen among the less educated section (illiterate and primary educated). The illiterates in Orissa (4.7 per cent) and Andhra Pradesh (4.1 per cent) show more coverage than the urban average (2.5 per cent). The primary educated show less significant coverage as compared to the respective urban average. The secondary levels of educated households, poorly match with the urban average. Coverage is lower than the average in most of the states. While the highly educated section show significant coverage. The coverage rate in the states is lower than the urban average.

High coverage states: The states with higher coverage rate than urban average show a similar pattern by all levels of education. For example, the states namely; Punjab, Haryana, Delhi, West Bengal, Jharkhand, and Karnataka show coverage higher than their respective urban average, in all levels of education. The rest of the states in this category show similar variations.

The general pattern of relatively high coverage among households with high education followed by those with middle school education and low coverage among households where the adults are illiterate or have only primary schooling is seen in all the states.

State-wise coverage rate among different Religious Groups:

Table 4.7 shows the households covered by health insurance by religious groups.

Low coverage states: All religious groups have lower coverage than all-India levels for the respective group. Uttar Pradesh, Bihar and Tripura, all the three states show similar trend.

Medium coverage states: In many states, the coverage is lower than the urban average for Hindus (11.4 per cent), except in Jammu and Kashmir (11.7 per cent). The Muslims in Jammu and Kashmir (8.2 per cent) and Tamil Nadu (4.0 per cent) show coverage higher than the national urban average for Muslims (3.6 per cent). While the 'other' religious group shows no significant coverage, except in states of Andhra Pradesh (7.6 per cent) and Tamil Nadu (11.9 per cent).

High coverage states: Among the Hindus, all states have coverage higher than the urban average (11.4 per cent). States like Haryana (13.3 per cent), Delhi (6.1 per cent), West Bengal (7.3 per cent), Jharkhand (4.0 per cent), Gujarat (4.4 per cent) and Karnataka (4.7 per cent) have coverage higher than the urban average (3.6 per cent), among the Muslims. While among 'other' caste group there is no significant coverage.

In all the states, coverage among Hindus is higher than among Muslims. Other religions do better than Hindus in many of the states.

Table-4.7

Percentage of Households with any health insurance by Religion across different states in Urban India, 2005-06

STATES	Religion of the Household			Total Insured
	HINDU	MUSLIM	OTHERS	
Jammu & Kashmir	11.7	8.2	(16.7)	9.7
Himachal Pradesh	11.8	(NI)	(NI)	10.9
Punjab	12.1	2.2	12.6	11.8
Uttaranchal	10.6	2.2	(10.0)	9.4
Haryana	14.8	13.3	(27.8)	15.1
Delhi	15.2	6.1	6.8	13.9
Rajasthan	12.5	2.2	18.5	11.1
Uttar Pradesh	4.0	1.4	3.8	3.3
Bihar	2.9	0.4	(16.7)	2.6
Tripura	3.0	(NI)	(NI)	2.8
Assam	7.3	3.8	(NI)	6.5
West Bengal	16.8	7.3	(25.6)	15.6
Jharkhand	14.5	4.0	(18.5)	13.1
Orissa	7.2	(4.1)	(18.2)	7.6
Chhattisgarh	12.4	(10.5)	(8.6)	11.8
Madhya Pradesh	15.2	3.4	24.6	13.9
Gujarat	19.1	4.4	(33.3)	17.7
Maharashtra	13.6	3.4	16.0	12.2
Andhra Pradesh	8.2	3.7	7.6	7.3
Karnataka	13.0	4.7	14.1	11.8
Goa	17.5	(8.3)	(7.7)	13.6
Kerala	13.1	3.5	12.7	11.2
Tamil Nadu	6.7	4.0	11.9	7.0
TOTAL	**11.4**	**3.6**	**13.4**	**10.4**

( ) sample size is less than 50.

States with sample size less than 50 in all religions have not been included in the analysis

NI = No Insurance

Source: Computed from Household data file, NFHS-III, 2005-06

Table-4.8

Percentage of Households with any health insurance by Caste across different states in Urban India, 2005-06

STATES	Caste of the Household				Total Insured
	SC	ST	OBC	Others	
Jammu & Kashmir	(NI)	(NI)	(8.3)	16.7	9.7
Himachal Pradesh	(18.2)	(NI)	(16.7)	9.5	10.9
Punjab	(8.3)	NA	11.4	13.7	11.8
Uttaranchal	8.0	(25.0)	(7.9)	10.1	9.4
Haryana	16.4	(NI)	15.4	14.7	15.1
Delhi	7.6	(18.8)	10.6	16.4	13.9
Rajasthan	7.2	4.8	5.0	18.1	11.1
Uttar Pradesh	1.7	(NI)	3.6	4.1	3.3
Bihar	1.6	(NI)	2.3	3.8	2.6
Assam	4.3	(5.9)	9.5	7.4	6.5
West Bengal	13.6	(6.9)	25.0	16.5	15.6
Jharkhand	12.3	(20.0)	10.7	15.1	13.1
Orissa	1.8	13.8	7.8	7.7	7.6
Chhattisgarh	8.3	(11.4)	11.2	15.1	11.8
Madhya Pradesh	11.3	17.3	7.2	20.9	13.9
Gujarat	13.0	20.0	11.7	23.0	17.7
Maharashtra	10.2	12.8	10.4	13.6	12.2
Andhra Pradesh	7.9	10.8	5.5	9.3	7.3
Karnataka	6.7	5.4	10.4	21.0	11.8
Goa	(NI)	(NI)	(14.3)	17.0	13.6
Kerala	6.6	(15.4)	9.4	13.1	11.2
Tamil Nadu	7.7	(33.3)	5.7	26.2	7.0
TOTAL	**8.3**	**10.8**	**7.4**	**14.1**	**10.4**

( ) Sample size is less than 50.

States with sample size less than 50 in all caste categories have not been included in the analysis

NI = No Insurance

NA = Not available

Source: Computed from Household data file, NFHS-III, 2005-06

State-wise coverage rate among different Castes:

Coverage rate with each caste group by states is shown in Table 4.8.

Low coverage states: All the caste groups including Scheduled Castes (SCs), Other Backward Castes (OBCs) and 'other caste' group has coverage less than the urban average. Coverage among the Scheduled Tribes (STs) is insignificant. Coverage is distinct in Uttar Pradesh and Bihar only.

Medium coverage states: States have shown mixed result. SCs have coverage less than the urban average (8.3 per cent). In case of STs, only Andhra Pradesh (10.8 per cent) and Orissa (13.8 per cent) have significant coverage. They stand at par with the urban average (10.8 per cent) among STs. OBCs in Assam (9.5 per cent) and Orissa (7.8 per cent) have significant coverage and more than all India urban OBC average (7.4 per cent).

High coverage states: SCs, OBCs and 'other caste' group show distinctive coverage. State-wise SC population show mixed levels of coverage. Half of the states stand below the urban average and the rest half above. The trend among the OBCs is also the same. While among the 'other caste' group, most of the states have coverage rate higher than the urban average.

The states in general show higher coverage among the 'other' castes, followed by STs and OBCs, among whom similar coverage trend is observed in the states. The SCs are less covered among all the castes.

State-wise coverage rate among different Wealth Groups:

Table 4.9 represents the coverage rate among the various wealth groups. Wealth index is considered here as a proxy indicator for income.

Low coverage states: No significant coverage is seen among the poor and middle income households. The richer and the richest households are also poorly covered.

Moderate coverage states: The poor households show no significant coverage. Coverage is weak among the middle income groups. The wealthy households have significant coverage. Among the richer households coverage is less than the urban average (5.2 per cent), while among the richest households, coverage is less then the urban average (18 per cent).

High coverage states: The poor and the middle income households show a similar picture as the moderate coverage states. The richer households have coverage higher than the urban average (5.2 per cent). And the richest households have mixed coverage rates. States namely Himachal Pradesh (12.5 per cent), Punjab (15 per cent), Uttaranchal (12.9 per cent), Delhi (17.5 per cent), Goa (17.5 per cent) and Kerala (16.3 per cent) have lower coverage than the urban average (18 per cent). The rest of the states are positioned above the average.

In general, the richest households have high coverage by health insurance in the states. While the richer households, show low coverage in the states, followed by very weak coverage among the middle and bottom quintile households in the states.

The gross effect of socio-economic variables on seeking health insurance has been well established. It brings out the influence of all the variables together. For example, households with higher education may seek health insurance more, but this may be more so, because of the impact of the income. This does not give the impact of the real picture of the individual variable on health insurance. Thus multivariate analysis is been done to see the effect of individual variable on seeking health insurance controlling the other factors. Table 4.10 shows the results of the logistic model for seeking health insurance.

Results from multivariate logistic regression show education, caste/ tribe, religion, income, and region are significantly related to health insurance. The highly educated households are more likely to access for health insurance than the less educated

population. As compared to the 'other' caste households, OBCs are less likely to access health insurance. While the wealthy households are more likely to purchase health schemes, than the bottom quintile households. The Eastern, Western and Southern regions significantly more likely to cover with health insurance and the North-Eastern and Central regions less likely to cover than the northern regions.

Table-4.9

Percentage of Households with any health insurance by Wealth Index across different states in Urban India, 2005-06

STATES	Wealth Index of the Households				Total Insured
	Poor	Middle	Richer	Richest	
Jammu & Kashmir	(NI)	(NI)	2.5	24.0	9.7
Himachal Pradesh	(NI)	(NI)	(7.1)	12.5	10.9
Punjab	(3.2)	4.7	7.0	15.0	11.8
Uttaranchal	(NI)	(5.6)	(2.2)	12.9	9.4
Haryana	(NI)	2.5	7.8	21.9	15.1
Delhi	(2.6)	4.2	7.3	17.5	13.9
Rajasthan	NI	NI	2.8	18.4	11.1
Uttar Pradesh	0.4	NI	1.1	6.9	3.3
Bihar	NI	1.1	0.9	5.8	2.6
Assam	NI	1.9	4.2	13.8	6.5
West Bengal	2.9	9.5	10.8	25.0	15.6
Jharkhand	NI	1.0	7.5	25.6	13.1
Orissa	5.6	5.6	3.6	3.5	7.6
Chhattisgarh	0.9	1.3	9.8	24.0	11.8
Madhya Pradesh	1.6	1.4	7.6	27.8	13.9
Gujarat	NI	2.4	9.1	26.1	17.7
Maharashtra	0.8	2.3	5.3	18.4	12.2
Andhra Pradesh	0.6	1.5	2.1	17.3	7.3
Karnataka	NI	5.5	7.7	19.8	11.8
Goa	(NI)	(NI)	(5.3)	17.5	13.6
Kerala	(2.9)	5.7	5.0	16.3	11.2
Tamil Nadu	NI	1.1	2.9	17.6	7.0
TOTAL	**0.9**	**2.7**	**5.2**	**18.0**	**10.4**

( ) Sample size is less than 50.
States with sample size less than 50 in all levels of wealth quintile have not been included in the analysis
NI = No Insurance
Source: Computed from Household data file, NFHS-III, 2005-06

Table 4.10

Results of Logistic Regression for Seeking Health Insurance

Characteristics	Sig.	Odds Ratio
Education Levels		
Illiterate (R)		
Primary	0.069	0.768
Secondary	0.017	1.291
Higher	0.000	2.323
Type of Caste		
Others (R)		
Scheduled Caste	0.527	1.037
Scheduled Tribe	0.009	1.343
Other Backward Caste	0.000	0.733
Religion		
Hindu (R)		
Muslim	0.000	0.396
Christian	0.620	0.952
Others	0.576	0.953
Wealth Index		
Poorest (R)		
Poorer	0.045	2.839
Middle	0.000	6.653
Richer	0.000	11.189
Richest	0.000	30.237
Region		
North (R)		
Central	0.000	0.778
East	0.000	1.277
North-East	0.000	0.570
West	0.000	1.343
South	0.097	1.108
Constant		0.004
Pseudo R^2		0.162
N		48466

®= Reference category

Source: Computed from NFHS-III data files, 2005-06

4.4. Health Insurance in India: Statistics of Market – Based Schemes

The data on market-based schemes reveal that over the years, the number of policies, members insured and the amount of premium has increased (Table 4.11 and 4.12), indicating a rise in demand for the schemes. Table 4.13, shows the number of people insured by age and sex. The data reveals coverage gap by sex. More number of

males is insured than females in all age-groups. Coverage is highest among the working age group (16-60 years) in case of both males and females. The older people are less insured than rest of the population. The old and the children the most vulnerable section of the population and their health care needs are more than the rest of the population.

The claims paid per policy and insured members have shown a steep rise over the period 2003-08 (Table 4.12). Table 4.14 shows the market share of health insurance by insurance companies. The data reveals the health insurance market is dominated by New India Assurance Company with 24 per cent of share followed by ICICI Lombard (17 per cent) and United India (14 per cent).

Table 4.11

Coverage by Policies, Insured Members and Claims over the years in India

Period	No. of Policies	No. of Members	Ave. no of members per Policy	No. of Claims
2003-04	2265451	8361629	4	360088
2004-05	2059449	8987239	4	555273
2005-06	3828495	16345575	4	1016785
2006-07	3110475	17907430	6	1060047
2007-08	3790838	24121625	6	1436998

Source: Rao, 2009

Table 4.12

Amount Covered by Premium, Insured Members and Type of Claims over the years in India

Period	Premium per Policy (Rs.)	Premium per Insured Member (Rs.)	Claim paid per Policy (Rs.)	Claims paid per Insured Member (Rs.)
2003-04	4166	1129	3465	939
2004-05	4792	1098	4606	1055
2005-06	4892	1146	4642	1040
2006-07	9067	1575	7066	1227
2007-08	7275	1143	7661	1204

Source: Rao, 2009

Table 4.13

Number of Insured Members covered by Market-Based Schemes by Age and Sex in India, 2007-08

Age in Years	MALE	FEMALE
	Insured Members	Insured Members
< 1	97278	90055
1 – 5	759990	638665
6 – 15	1384808	1135013
16 – 25	2112014	1633498
26 - 40	4026058	3085837
41 – 60	2983681	2684142
61 – 65	411416	268342
66 – 70	234412	143172
Above 70 years	265630	120939
Grand Total	12275287	9799663

Source: Rao, 2009

Table 4.14

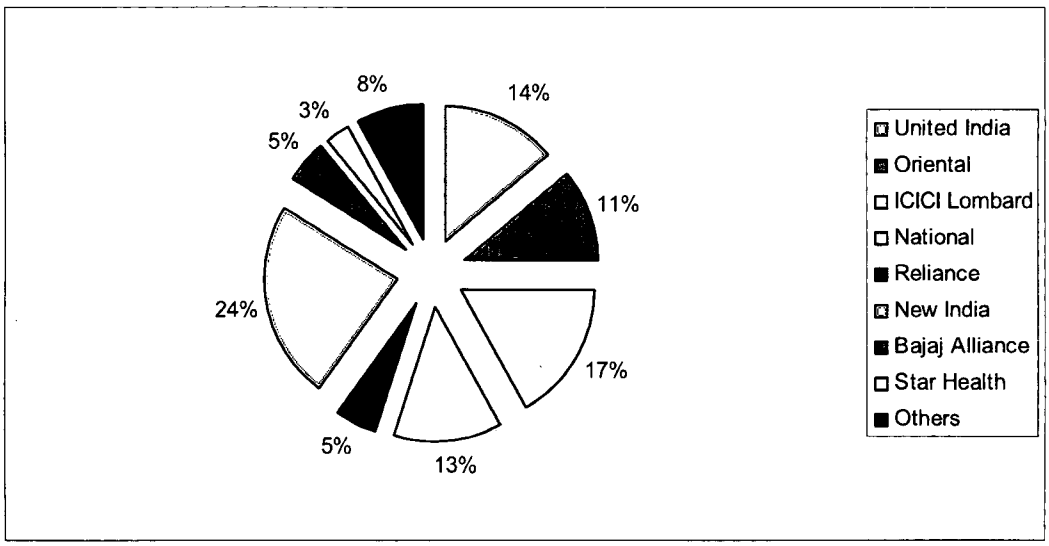
Percentage of Market Share of Health Insurance by Insurance Companies in India, 2007-08

Insurance Companies	Percentage of Market Share
United India	14
Oriental	11
ICICI Lombard	17
National	13
Reliance	5
New India	24
Bajaj Alliance	5
Star Health	3
Others	8

Source: Rao, 2009

Figure 4.1

Percentage of Market Share of Health Insurance by Insurance Companies in India, 2007-08



Source: Table 4.14

4.5. Information from the National sample Survey Organization (NSSO-2004) on Health Insurance:

Direct estimates are not provided in NSSO 60th round, however an attempt has been made to show the number of ailing persons who sought medical treatment being reimbursed (considered a type of health insurance). Only 0.4 per cent of the population got reimbursed after they sought medical treatment. In urban India 0.8 per cent of the population, and in rural areas only 0.2 per cent of the population got reimbursed (Table 4.15).

By type of source from where reimbursement was received, government agencies provided reimbursed the maximum in India (65 per cent). The trend is same in urban and rural India. By caste, the 'other' caste population have got the maximum reimbursement as compared to rest of the castes, but the percentage of population reimbursed is low (0.6 per cent).

Table 4.15

Percentage of medically treated population getting reimbursement by source during the last 15 days prior to the survey, India, 2004

Characteristics	Percentage of the treated persons getting reimbursement	Percentage of people received reimbursement by source			
		Employer		Medical insurance companies	Other agencies
		Government	Private		
INDIA	0.4	65.0	19.1	5.9	9.9
URBAN	0.8	71.2	19.8	2.3	6.7
RURAL	0.2	52.6	17.8	13.2	16.7
SOCIAL GROUP					
SC	0.2	93.6	6.3	0	0
ST	0.2	43.8	12.2	12.2	31.8
OBC	0.3	53.7	19.7	13.6	13.0
Others	0.6	74.5	21.1	1.2	3.2

Source: NSSO 60th Round, 2004; NSSO (2006)

4.6. Allocation of fund on health by states (2000 – 2005):

The state budgets show there is no consistency in allocation of budgets on health over the years (2000-05). The states budgets reveal very low resources allocated on health. Though there is very weak correlation between the health expenditure and health insurance coverage, the figures however brings out the state of weak financing of health in our country (Table 4.16).

Table 4.16

Expenditure on Medical Health and Public Health and Family Welfare (Revenue Expenditure and Capital Outlay as Ratio to Aggregate Disbursements) in India

STATES	2000-01 (percent)	2001-02 (percent)	2002-03 (percent)	2003-04 (percent)	2004-05 (percent)	Percent of health insured population in Urban India*
Andhra Pradesh	4.7	4.4	4.0	3.8	3.4	7.3
Arunachal Pradesh	5.0	4.9	4.5	3.7	4.3	12.1
Assam	4.7	4.2	3.7	3.4	3.1	6.5
Bihar	5.9	4.9	4.2	3.8	3.2	2.6
Chhattisgarh	4.1	4.3	4.0	3.6	3.7	11.8
Goa	4.4	3.8	4.0	4.4	3.3	13.6
Gujarat	3.4	2.8	3.2	2.5	3.0	17.7
Haryana	3.3	3.0	3.3	2.8	2.8	15.1
Himachal Pradesh	5.6	4.9	4.5	5.2	5.1	10.9
Jammu & Kashmir	4.9	5.5	5.2	5.5	4.8	9.7
Jharkhand	NA	4.9	4.2	4.1	3.7	13.1
Karnataka	5.1	4.9	4.2	3.5	3.5	11.8
Kerala	5.3	5.8	4.8	4.5	4.7	11.2
Madhya Pradesh	5.1	4.1	4.1	3.1	3.4	13.9
Maharashtra	3.9	4.3	3.7	3.3	3.5	12.2
Manipur	4.8	3.4	2.9	3.2	3.7	10.4
Meghalaya	5.6	6.6	5.9	4.8	5.2	1.4
Mizoram	5.4	5.4	5.0	5.6	4.0	3.9
Nagaland	5.2	4.1	4.6	4.0	4.7	2.2
Orissa	4.2	3.7	3.8	3.4	3.9	7.6
Punjab	4.5	3.9	3.5	3.4	3.1	11.8
Rajasthan	5.2	5.2	4.2	3.9	3.9	11.1
Sikkim	3.7	2.2	2.0	3.2	2.6	14.2
Tamil Nadu	4.9	4.9	4.1	4.0	4.2	7.0
Tripura	4.0	3.7	3.8	4.2	3.8	2.8
Uttar Pradesh	4.0	3.6	3.8	3.1	4.5	3.3
Uttaranchal	3.1	4.4	3.8	3.9	4.3	9.4
West Bengal	5.6	5.0	4.9	3.9	3.8	15.6
Delhi	7.2	6.7	6.3	5.9	7.0	13.9

Source: State Finances: A Study of Budgets of 2004-05 and *estimates from NFHS-III (2005-06)

4.7 Summary:

In India though a number of organization have contributed to improve health care financing, the coverage has remained low. Moreover there are vast regional differences in terms of coverage. The north-eastern states stay far behind in health insurance coverage. The poor outreach of health insurance will further depict their health status. The differences are further seen while considering the socio-economic condition.

As per the hypothesis, the highly educated, Hindus, 'other' caste group and the highest two wealthy groups (richer and richest households) are better covered under the schemes than others. The data based on Rao's (2009) estimate shows that the market based schemes is emerging as a significant player in the health insurance market. There has been growth in the number of insurers over the period 2003 to 2008 and if this continues then health insurance market is expected to reduce the burden of health care financing to a great extent in the future. A positive growth is predicted for the future.

CHAPTER 5

ROLE OF HEALTH INSURANCE IN HEALTH SEEKING BEHAVIOUR

5.1. Introduction

To begin with, the first question that comes in our mind is what role the National Health Policy makers have played till now in improving the health situation in India? The success of the National Health Policy of 1983 which aimed to reduce the burden of health care and make accessibility easier for the mass by laying down the objective "Health For All by the year 2000", is far away from reality. The Government of India in 1983, took a major decision, that as per the state's requirements, health insurance schemes should be devised in such a way that it could be used for mobilizing additional resources for health promotion. The recent period National Health Policy 2002, recognized social health insurance as an important instrument to make accessibility to health care equitable.

It is believed that insured people are healthier than the uninsured since they are more likely to access health care services than the uninsured when sick. However, evidence to support this statement is very limited. Studies on health care utilization by the insured are few, however the basic notion that has developed among the researchers is insurance definitely plays a major role in receiving good health care and ensuring good health in the long run. The significant impact of insurance on health care depends on the availability, accessibility and affordability of the insurance. Since insurance coverage is very weak (IIRC and Macro-International, 2007; Bhat and Mavalankar, 2000) in most of the developing countries including India, its impact on heath care utilization is difficult to understand. However, an effort has been made here to study the impact of health insurance on the health care utilization for India using NFHS-III data.

Based on the notion that insurance coverage largely decides the health care utilization, it is expected that with poor coverage, health care utilization may be low though needs may be high. In case of frequent illness, treatment received will be less because of the affordability factor since the burden of care will be high. In such cases, the household will seek for options to reduce the burden of treatment. An important determinant of good health is access to and use of quality care services, which is further determined by its availability and affordability factor. Thus, small and affordable measures can reduce the health risks that often the needy and vulnerable face.

5.2. Morbidity and Health Care Expenditure

For the present study, estimates on prevalence of morbidity are used which is obtained from the National Sample Survey report. The survey termed it Proportion of Ailing Persons (PAP), measured as the number of persons reporting ailment during a 15-day period per 1000 persons for some broad age-groups. In demographic context, PAP is better known as 'Period Prevalence Rate' for a 15 day period. The PAP are found to be higher for children (7 – 8 per cent) and much higher for the higher age groups, the lowest being the PAP for the age group15-29 years (5 per cent). At the national level, 13 percent of persons in the age group 45-59 reported ailments, and 30 per cent among the aged population. The proportion was as high as 12 and 15 percent for the persons between age-group 45-49; and 28 and 37 per cent for the persons aged 60 years and above in rural and urban areas, respectively, while the population below 14 years age show 7.4 per cent reported ailments in India (Table 5.1). The male – female differentials show females reported ailments low in the lower age group (below 14 years) as against males at the national level. However, the PAP among the females increases as compared to males in rest of the age-group.

Table 5.1

Proportion of Ailing Persons by sex and age group, India, 2004

	Number ailing per 1000 persons				
	Urban	**Rural**	**ALL INDIA**		
Age Group	Persons	Persons	Male	Female	Persons
0-14	79	72	78	69	74
15-29	50	49	42	56	49
30-44	79	78	64	93	78
45-59	149	119	113	143	128
60 and above	368	283	301	307	304
Total	**99**	**88**	**85**	**97**	**91**

Source: NSSO 60th Round, 2004; NSSO (2006)

5.2.1 Proportion of Ailing Persons Treated

Out of the total persons reported ailment during a period of 15 days, in the rural (9 per cent) and urban areas (10 per cent) in India, 82 per cent and 89 per cent are medically treated in the rural and urban areas respectively (Table 5.2). The rest who do not receive medical treatment sometimes resort to self-medication, home remedies or no medical care. Regarding the untreated spells of ailments, it is seen that, in the current round of survey, the reason most often cited for no treatment for the ailment is 'not serious'. This reason was reported by 32 percent and 50 percent of the cases of untreated ailments in the rural and urban areas, respectively. The 'financial problem' was next in importance as a reason for no treatment, accounting for 28 percent and 20 percent of the untreated ailments in the rural and urban areas, respectively (Table 5.3).

Table 5.2

Distribution of ailing persons medically treated by area and type of institution, India, 2004

REGION	Percentage of ailing persons who sought medical treatment			Percentage of ailing persons sought medical treatment by type of Institutions	
	Male	Female	Persons	Government Institutions	Private Institutions
RURAL	82	82	82	22.4	77.6
URBAN	90	89	89	19.0	81.0

Source: NSSO 60th Round, 2004; NSSO (2006)

Table 5.3

Percentage distribution of untreated spells of ailments by reasons for no treatment, India, 2004

Reasons for no treatment	RURAL	URBAN
No medical facility	12	1
Facility available but:		
Lack of faith	3	2
Long waiting	1	2
Financial problem	28	20
Ailment not considered serious	32	50
Other reason	24	25
All	100	100

Source: NSSO 60th Round, 2004; NSSO (2006)

The percentage share of ailing persons, who sought medical treatment by type of institutions, show that private institutions are mostly accessed. In rural areas, it is 72.6 per cent and it is 81 per cent in urban areas of the ailing persons sought medical treatment from private institutions (Table 5.2).

5.2.2 Health Care Expenditure

The household expenditure on health accounts for a major share of about 70-80 percent of the total health expenditure in India. Rural households in India bear the maximum burden as they account for about 85 percent of the total household expenditure on health. The estimates of average health expenditure[5] for non-hospitalized treatment per ailing person during a period of 15 days show that rural India spends an average of Rs.284 and Rs.326 in urban areas (Table 5.4). The cost incurred by households for only 'medical expenses'[6] show that in private institutions more amount is spent, with the rural area spending Rs. 246 as an average medical expenditure, while the urban areas Rs. 299. The amount of money spent on 'other expenditure'[7] is less in urban areas (Rs. 20) than rural areas (Rs.27).

Table 5.4

Distribution of average health expenditure incurred by households for non-hospitalized treatment per treated person by area, India, 2004

REGION	Medical expenditure (Rs.) (1)		Other Expenditure (Rs.) (2)	Total health expenditure (Rs.) (1) & (2)
	Government Institution	Private Institution		
RURAL	11	246	27	284
URBAN	7	299	20	326

Source: NSSO 60th Round, 2004; NSSO (2006)

[5] includes sum total of the 'medical expenses' and 'other expenses'

[6] includes expenditures on items like medicines, bandages, plaster etc., fees paid for medical and para-medical services, charges for diagnostic tests, charges for operation and therapies, charges for ambulance, costs for oxygen and blood etc.

[7] expenses incurred by households, related with treatment of an ailing member of the household, other than medical expenditure. It includes, transport charges (except ambulance charges) paid by households, lodging charges of the patient and her or escort(s), , attendant charges paid, and personal medical appliances purchased during the reference period

The average health expenditure incurred on hospitalized treatment[8] varies from Rs.11176 in rural areas to Rs.15946 in urban areas during 365 days prior to the survey (Table 5.5). The average 'medical expenditure' spent by households in rural India is Rs.5695 and Rs.8851 in urban areas. While by type of institutions household spend more on private institutions in the urban areas (Rs.11553), than private institutions in rural areas (Rs.7408). The public and private share of medical cost shows wide gap. The average 'other expenditure' in rural areas (Rs.530) is higher than the urban areas (Rs.516).

Table 5.5

Distribution of average health expenditure incurred by households for hospitalized treatment per treated person by area, India, 2004

REGION	Medical expenditure (Rs.) (1)		Other Expenditure (Rs.) (2)	Total health expenditure (Rs.) (1) & (2)
	Government Institution	Private Institution		
RURAL	3238	7408	530	11176
URBAN	3877	11553	516	15946

Source: NSSO 60th Round, 2004; NSSO (2006)

Table 5.6

Distribution of average loss of household income by type of treatment, India, 2004

REGION	Non-hospitalized treatment (Rs.)	Hospitalized treatment (Rs.)
RURAL	135	636
URBAN	96	745

Source: NSSO 60th Round, 2004; NSSO (2006)

[8] medical treatment of an ailing person as an inpatient in any medical institution having provision for treating the sick as inpatients is considered as hospitalized treatment.

Table 5.6 gives a brief description of the average loss of household income in seeking health care services in India. The rural households spend more on non-hospitalized treatment (Rs.135) and urban households spend more on hospitalized treatment (Rs745).

The above data gives the picture of the amount spent on health, thus the need of health insurance is what should be health policy focus, at least to reduce the burden of the poor and the low income groups and the vulnerable.

5.3. Health Insurance and Health Care Utilization

Utilization of health care services is assumed to get affected with the proliferation of health insurance in the health market. Percentage of individuals seeking health care is assumed to increase with the purchase of health insurance.

The study focuses on the use of health care services by the insured households in comparison with the non-insured households, controlling other socio-economic variables across India. The focus is mainly on the health care utilization by the households for maternal and child health care. The scarcity of data has limited our study and hence the focus is on only a few aspects. The NFHS-III has asked questions on maternal and child health care availed for births during the past five years prior to the survey to women of ages 15-49. Maternal health care includes women any antenatal care, delivery care and post-natal care. In the study, the focus is only on antenatal care and delivery care. There is no significant effect, with no difference among the insured and non-insured households in receiving antenatal care, 99.0 per cent of the urban insured households and 96.1 per cent of the non-insured households receive antenatal care respectively.

Table 5.7

Differentials in delivery Care by place, Urban India, 2005-06

Characteristics	Percentages Sought Delivery Care by Place		Number of women who had a delivery
	HOME	INSTITUTIONAL	
Health Insurance Status			
Not Insured	33.7	66.3	13375
Insured	12.8	87.2	928
Woman's Educational Level			
Illiterate	62.9	37.1	4048
Primary	41.0	59.0	1799
Secondary	19.5	80.5	6524
Higher	3.7	96.3	1933
Husband's Educational Level			
Illiterate	62.2	37.8	2452
Primary	43.9	56.1	1797
Secondary	28.1	71.9	7308
Higher	9.7	90.3	2745
Type of Caste			
Others	29.4	70.6	11153
Scheduled Caste	42.4	57.6	2667
Scheduled Tribe	46.3	53.7	482
Religion			
Hindu	30.6	69.4	10392
Muslim	41.7	58.3	3119
Christian	19.6	80.4	377
Others	18.1	81.9	415
Women's Occupation Status			
Not working	31.4	68.6	11722
Working	36.7	63.3	2548
Husband's Occupation			
Not Working	36.8	63.2	163
Skilled and Unskilled Manual	34.5	65.5	12728
Non Manual	12.1	87.9	1389
Wealth Index			
Poorest	73.6	26.4	681
Poorer	63.4	36.6	1184
Middle	49.0	51.0	2365
Richer	33.9	66.1	4354
Richest	12.9	87.1	5718
Total	32.4	67.6	14304

Source: Computed from NFHS-III data file, 2005-06

5.3.1 Place of Delivery

Place of delivery is an important factor in the risk of maternal deaths. Moreover the type of delivery care decides the safe mode of care received by the mothers. Around 32.4 per cent of the women have gone for home delivery in Urban India, while the rest for institutional delivery. Among the insured households, 87.2 per cent of women underwent institutional delivery, among the non-insured 66.3 per cent did so. In addition to this, a few explanatory variables were used to see the nature of change among the households.

The better educated sections (secondary and higher educated) highly access institutions for delivery. Considering population by caste status, SC and ST households seek less institutional facilities than the national average. Christian and other religious groups have more commonly accessed institutional facilities than Hindus and Muslims. Wives of men involved in non-manual jobs seek primarily institutional delivery care. By type of wealth quartile only the richest show high accessibility (87.1 per cent) as compared to the national average (Table 5.7). Thus institutional health care facilities are still a burden even for the middle income groups.

The differentials do not necessarily indicate effects of the respective variables since many of the explanatory factors are associated. Hence, multivariate analysis has been performed to assess net influences of various factors. Results from multivariate logistic regression models are given in Table 5.8 for urban India. What is clear from the table is that not all variables are equally important discriminating factors for the type of delivery care availed. Insurance was found to be an important predictor of receiving institutional delivery care in the country. This is the case even after various socio-economic factors are controlled. Education of both the sexes and wealth status proved to be important in accessing institutional delivery care. High educated groups are more likely to access institutional care.

Table 5.8

Results of Logistic Regression for Seeking Institutional Care for Delivery

Characteristics	B	Sig.	Odds Ratio
Health Insurance Status			
Not Insured (R)			
Insured	0.279	0.012	1.322
Women Education Levels			
Illiterate (R)			
Primary	0.674	0.000	1.961
Secondary	1.337	0.000	3.809
Higher	2.646	0.000	14.104
Husbands Education Levels			
Illiterate (R)			
Primary	0.340	0.000	1.405
Secondary	0.303	0.000	1.354
Higher	0.460	0.000	1.585
Type of Caste			
Others (R)			
Scheduled Caste	0.299	0.000	0.741
Scheduled Tribe	0.407	0.000	0.665
Religion			
Hindu (R)			
Muslim	0.219	0.000	0.804
Christian	0.237	0.108	1.268
Others	0.254	0.083	1.289
Women's Occupation Status			
Not working (R)			
Working	0.100	0.097	1.105
Husband's Occupation			
Not Working (R)			
Skilled and Unskilled Manual	0.354	0.061	1.424
Non Manual	0.455	0.031	1.576
Wealth Index			
Poorest (R)			
Poorer	0.205	0.062	1.227
Middle	0.563	0.000	1.756
Richer	0.896	0.000	2.449
Richest	1.427	0.000	4.167
Constant			0.208
Pseudo R^2			0.323
N			19370

® Reference category

Source: Computed from NFHS-III data files, 2005-06

It is generally believed that the demographic behaviour of members of 'socially backward' communities such as scheduled caste and scheduled tribes is different from that of other communities. The results show that caste is a differentiating factor for the use of delivery care services, while religion did not turn out to be a significant factor, when effects of other factors are controlled.

Women's working status and men's occupational pattern are not statistically significant. Wealth index is statistically significant, those from higher income classes accessing more institutional care than the others.

5.3.2 Treatment Seeking Behaviour

Loss of income in a household occurs when the household seeks health care for treatment or other purpose since medical treatment involves lot of money. Thus a person or a household seeking health care facilities due to illness is supposed to be in need of some sort of subsidized payment which would otherwise reduce the burden of health care cost required for treatment of the illness. The function of health insurance comes into play when such need of subsidized payment arises.

The NFHS-III covers data on type of illness and treatment sought in case of illness among the children in each household. Thus, studying treatment seeking behaviour is understood in terms of child morbidity. Since the study focuses on the role of insurance on treatment seeking behaviour of the households where the children suffers from some sort of illness, different diseases have been taken into account for whom treatment has been sought. NFHS-III covers diseases such as diarrhea, fever and acute respiratory diseases among the children.

Diarrhea

The bivariate table shows that a greater percentage (78 per cent) of insured households seeks treatment when the child suffers from diarrhea than the non-insured households (66 per cent). Christian and other religious groups, more educated women, non manual working group and richest section seek treatment more than the national average (Table 5.9).

However, the multivariate analysis shows that insurance and other control variables show no significant effect on treatment seeking behaviour, except wealth status. It has been observed that wealth index exhibits the strongest influencing factor among other variables. The highest two income quintiles show some significant effect on treatment seeking behaviour among the ill. The net effect of rest of the variables is insignificant. The wealthy households are more likely to seek medical treatment than the richer households.

The odds ratio explains us about the net effect of health insurance on health care utilization. Hence, from the table we can see that controlling other background characteristics, the net effect of insurance on health care utilization is not significant. So, it can be concluded that controlling other characteristics, individuals by just being an insurer or a non insurer would not make a large difference in treatment seeking behaviour.

Table 5.9

Determinants of seeking health care when child is suffering from Diarrhea, India, 2005-06

Characteristics	Treatment Sought		Results of Logistic Regression for Seeking Medical Treatment in case of Diarrhea	
	Percentage Treatment Sought	Sample	Sig.	Odds Ratio
Health Insurance Status				
Not Insured ®	66	1152		
Insured	77.8	63	0.195	1.513
Women Education Levels				
Illiterate ®	60.8	339		
Primary	60.9	161	0.578	0.889
Secondary	70.3	595	0.628	1.092
Higher	73.1	119	0.747	1.103
Husbands Education Levels				
Illiterate ®	58.5	193		
Primary	64.1	156	0.552	1.15
Secondary	68.9	656	0.726	1.073
Higher	68.7	211	0.246	0.726
Type of Caste				
Others ®	66.5	930		
Scheduled Caste	67.8	242	0.236	1.223
Scheduled Tribe	65.1	43	0.799	1.095
Religion				
Hindu ®	66.4	852		
Muslim	64.8	293	0.617	1.084
Christian	72.4	29	0.716	1.172
Others	80.5	41	0.19	1.736
Women's Occupation Status				
Not working ®	67	1020		
Working	64.2	193	0.892	0.977
Husband's Occupation				
Not Working ®	61.5	13		
Skilled and Unskilled Manual	65.9	1104	0.969	0.977
Non Manual	75.3	97	0.616	1.389

Table Continued

Characteristics	Percentage Treatment Sought		Results of Logistic Regression for Seeking Medical Treatment in case of Diarrhea	
Wealth Index				
Poorest ®	43.6	55		
Poorer	60.7	89	0.069	1.896
Middle	57.2	215	0.109	1.652
Richer	67	403	0.003	2.471
Richest	74.6	453	0.000	3.63
Total	66.6	1214		
Constant				0.606
Psuedo R^2				0.052
N				1681

®= Reference category
Source: Computed from NFHS-III data files, 2005-06

Fever

Treatment sought in case a child is suffering from fever does not show any notable difference among the insured and non-insured households (Table 5.10). And it does not vary much with differential backgrounds as compared to the national level. Overall, fever is taken seriously by most households and in about 80 per cent of cases treatment is sought. Hence, this variable is not analyzed further.

Table: 5.10

Percentage seeking medical treatment in case of fever by health insurance status, India, 2005-06

Health Insurance Status	Percentage Treatment sought	Total
Not Insured	80.0	1796
Insured	77.7	121
Total	79.8	1917

Source: Computed from NFHS-III data files, 2005-06

5.4. Access to Health Care Facilities by Types

It is assumed that accessibility of using health care services will improve with more people getting insured. Since institutional facilities (public and private health care) offer good health care, they are assumed to be accessed more with the improvement of health financing.

Results of Multinomial Logistic Regression for Seeking Health Care by Type of Facilities: The analysis result for seeking public health care by the insured shows, that insurance has a significant positive effect on seeking both public and private health care facilities, after controlling other variables (home treatment/no treatment is the reference category for the dependent variable). An insured person is more likely to go for public and private health care than an uninsured. All the other background characteristics are insignificant, except levels of education, religion (Christians) and wealth index. The higher educated are less likely to use public health care than the secondary level educated groups. The richest are less likely to seek public health care services and more likely to seek private services (Table 5.11).

Table 5.11

Results of Multinomial Logistic Regression for Seeking Health Care by Type of Health Facility, Urban India, 2005-06

Characteristics	PUBLIC FACILITY*		PRIVATE FACILITY*	
	Sig.	Odds Ratio	Sig.	Odds Ratio
Health Insurance Status				
Not Insured (R)				
Insured	0.000	9.814	0.000	6.566
Education Levels				
Illiterate (R)				
Primary	0.313	0.908	0.000	0.623
Secondary	0.000	0.540	0.000	0.455
Higher	0.000	0.305	0.000	0.353
Type of Caste				
Others (R)				
Scheduled Caste	0.019	0.841	0.000	0.595
Scheduled Tribe	0.123	0.788	0.000	0.743
Religion				
Hindu (R)				
Muslim	0.915	1.008	0.001	0.791
Christian	0.000	3.405	0.001	1.979
Others	0.155	1.256	0.022	1.411
Husband's Occupation				
Not Working (R)				
Skilled and Unskilled Manual	0.869	0.971	0.236	1.173
Non Manual	0.428	0.868	0.350	1.173
Wealth Index				
Poorest (R)				
Poorer	0.263	0.807	0.724	1.069
Middle	0.280	0.827	0.854	1.032
Richer	0.382	0.860	0.019	1.493
Richest	0.001	0.560	0.002	1.722
Psuedo R^2				0.065
N				40818

®= Reference category

* Other (home treatment or no treatment) is the reference category for the dependent variable

Source: Computed from NFHS-III data files, 2005-06

5.5. Summary:

The findings reveal that health insurance has less impact on health care utilization, except in households who sought institutional delivery care, treatment sought in case of diarrhea and by type of facilities. These findings correspond to the research works of many scholars like Jutting, 2000; Lui *et al.,* 2003; Card *et al.*, 2004. In case of fever there shows no such difference, the reason might be that fever was self-medically treated and reported as 'medically treated' by the respondents, a case of under-reporting. The most probable reason could be, in case of fever and diarrhea among children, negligence is less. Medical treatment cost for the diseases is low as compared to many other existing diseases and since child health cannot be neglected, treatment is sought in absence of health coverage.

CHAPTER – 6

SUMMARY FINDINGS AND CONCLUSIONS

6.1 Summary Findings

In developing countries, health insurance is not a commonly purchased financial instrument. Recent debates have revolved around extending health insurance coverage to a wider range of the population, primarily via compulsory insurance schemes. It has been found that in developing countries like India, out-of-pocket payment accounts as one of the largest component in health care expenditure among the households, indicating the inadequacy of the public financing of health care. And the growing reliance on private sector from all sections of the population further focuses on the inability of the government to provide the basic quality health care. The findings indicate that a majority of these households are concentrated in low income deciles and that clearly point towards a higher burden of health spending for the poor households.

Against this background, this study examined the extent to which households in India have access to health insurance, the socio-economic differentials in seeking health insurance and whether having health insurance has any impact on treatment seeking. The study reveals that Indian health insurance market is grappling with marked inequalities in terms of coverage with sharp rural-urban, socio-economic and inter-regional disparities. The analysis in the present research study primarily based on the National Family Health Survey (NFHS-III) data, reveals that in India health insurance coverage is poorly accessed by the masses. Earlier studies also revealed the weak growth of health insurance in India (Mavalankar and Bhat, 2000; Gupta and Trivedi, 2004).

Higher coverage concentrates in the urban areas of India, accounting to 10.4 per cent. The break-up of this average brings out the vast regional difference in terms of coverage. Most of the north-eastern states have low coverage; the Indian scenario is not much different from the urban India scenario. However, the highest health insurance coverage state is Delhi (13.9 percent), while in urban India, it is Gujarat (17.7 per cent). More than half of the states have coverage higher than the national average (4.9 per cent)

More than half of the states have coverage higher than the national average (4.9 per cent) and urban average (10.4 per cent). A few states have coverage higher than the urban average, Rajasthan (11.1 per cent), Jharkhand (13.1 per cent), Chhattisgarh (11.8 per cent), Madhya Pradesh (13.9 per cent), and Himachal Pradesh (10.9 per cent). Remarkably, these states have insurance coverage higher than the highly developed states like Tamil Nadu (7.0 per cent) and Kerala (11.2 per cent). Urban Haryana (15.1 per cent) and West Bengal (15.6 per cent) are among the other states with high coverage. Thus, there is vast inter-regional difference in terms of coverage.

Given the insignificant coverage in rural areas, this study concentrated on the urban population. The NFHS-III data files allowed an analysis of coverage by schemes and socio-economic and regional differentials in insurance coverage. The coverage by type of schemes revealed that the government owned compulsory schemes dominate the health insurance market. The Employees State Insurance Scheme (ESIS) and Central Government Health Scheme (CGHS) cover 3.0 per cent and 2.2 per cent population respectively accounting to a total of 5.2 per cent in urban India. Thus, social health insurance is the most expanded form of health insurance available in the market. The privately purchased schemes or voluntary health schemes also emerge as a significant contributor to the health insurance market in urban India accounting to 2.8 per cent coverage. These schemes are offered by private and public sector companies like the 'Mediclaim Policy' by General Insurance Corporation (GIC) and its subsidiary companies, schemes offered by Life Insurance Corporation (LIC), and other insurance companies. Though detailed account by NFHS about the individual company coverage has not been provided, the profit-based schemes in India are run by the above mentioned companies. While studying individual states by type of schemes, it has been noticed that the trend is similar, with large number of states covering social health insurance and voluntary health schemes.

The employer managed insurance (includes schemes provided through employer and reimbursement schemes) comprises the largest share of coverage (Mavalankar and

Bhat, 2000; Ellis *et al.*, 2002). However, they comprise only 2 per cent of coverage in Urban India.

This depicts that this sector is not properly tapped. Community health financing is the weakest in terms of coverage. These schemes are run by non-governmental organizations on both profit and non-profit basis for the poor and the vulnerable people, and for the people involved in unorganized sectors. Most of the organizations (ACCORD, SEWA, RAHA, VHS etc., work in rural areas (Devadasan *et al.*, 2004; Kuruvilla *et al.*, 2005). Hence, their coverage is weak in urban areas; and also the problem of locating the urban poor is difficult who comprise mainly the workers in unorganized sector. Thus health security in the form of community health schemes is still insignificantly and unequally covered in our country.

Comparing the coverage among the various socio-economic groups it has been found that, coverage is weak among the uneducated and low educated groups comprising 2.5 per cent and 2.6 per cent of the population respectively. However, a few states show coverage higher than the urban average, Punjab, Haryana, Delhi, West Bengal, Jharkhand, Orissa, Chhattisgarh, Andhra Pradesh and Karnataka. The higher coverage rate among these states corresponds to the fact of the type of schemes that is predominant in these states. The most probable reason is, these states are predominantly covered by the ESIS schemes, and these schemes are meant for the factory workers who are supposedly not educated or low educated people. The same coverage trend is seen among the poor households among the already mentioned states. Though, the causal relationship between the none and poorly educated, ESIS scheme holders and poor households is not statistically proved, the probable reason has been assumed.

Studying coverage by caste, Other backward castes (OBCs) are weakly covered (7.4 per cent) in comparison to Scheduled castes (SCs) – 8.3 per cent, Scheduled tribes (STs) – 10.8 per cent, and 'other' castes – 14.1 per cent respectively. The state-wise break up show, varying differences. The states with higher coverage than urban average among the SCs or STs show no parallel results with rest of the castes. The results by type

of religion show 'other' religious groups have higher coverage (13.4 per cent) than Hindus (11.4 per cent) and Muslims (3.6 per cent). While the wealthy households show more coverage for health insurance, accounting to 5.2 per cent and 18 per cent among the richer and richest households.

The net influence of the socio-economic factors on accessing health insurance, assessed by multivariate logistic regression analysis of the unit level NFHS-III data, show that higher educated, Scheduled tribe (STs), Other Backward Castes (OBCs), Muslims, and highest wealth quintile households, are significantly related to health insurance.

The other objective arises on account of health care financing problems; the role of health insurance on health care utilization has been studied. Taking each individual dependent variable depicting access to health care utilization, it has been found that insurance was found to be an important predictor of receiving institutional delivery care in the country. The other dependent variables drawn to study the role of insurance on health care utilization show no significant impact. Medical treatment sought for diarrhea was not statistically significant to ensure the impact of insurance on it. On the other hand the effect of insurance was statistically significant with both types of health care services in general (public and private). In all the cases studied on health care utilization 'income' was found to be statistically significant, thus an important predictor for accessing health care. This is seen in the study of Jutting (2000). Thus, it is seen that insurance creates unequal access to health care services. These findings correspond to the research works of many scholars like Jutting, 2000; Lui *et al.,* 2003; Card *et al.*, 2004.

The relationship between health insurance and health care utilization is not very strong in some of the cases studied. Health insurance is not necessarily a highly influencing factor to seek health care. In case of illness like diarrhea and fever, households will seek health care even if they are not insured, since illness of children cannot be ignored and also illnesses of other types among all age-group people cannot be neglected. Diseases which are very costly and take long duration to cure will require health insurance to support financing for the treatment. Moreover, health schemes do not

cover all diseases and there are many complications (long waiting time, long processing time for reimbursement etc.,) in the schemes offered by agencies which restrain people to seek health care under insurance coverage. Thus, in case of ailing children, parents will not waste time in deciding for receiving health care from where the doors for seeking treatment is opened. Since the 'choice' given to health insurance consumers is limited, the decision comes instantly and not, what the 'insurance' schemes sets. Treatment seeking behavior is highly influenced when one is seeking treatment from the type of health care institutions. Insured households will seek more from the private and public facilities than seeking home or other type of facilities. The access of private facilities increases further, when quality service is concerned than public facilities.

6.2 Implications

Findings reveal that in urban India, insurance coverage is very low and restricted to people of higher income quintiles. However, the statistics reveal that health insurance is more an urban and wealthy class phenomenon in India. The rural areas are deprived of significant health insurance coverage. Although, regression analysis indicates households having any health insurance scheme tend to utilize health care services more compared to those without any health insurance, the base of this hypothesis is partially true. After the economic reform in the 1990s, the welcoming of private sector is seen from different perspectives and till date the debate is still on. The arguments point against the emergence for the private health market. But the National Health Policy 2002 encourages the setting up of private insurance mechanisms for improving the scope of coverage.

The current coverage is restricted to the organized sector where the government through the state run schemes like ESIS and CGHS covers about 5 per cent of the population along with the employer managed facilities (reimbursement schemes and medical benefits) contribute to significant proportion of health expenditure. Though voluntary private health insurance companies have emerged as an insignificant contributor, they have already captured the health insurance market. The problem with these organizations is that, they are costly and may force people to high indebtness, but

they can in fact improve the health financing problem in India. The private health insurance market is criticized on being profit-motivated and for giving lesser choice to the consumers. However, it is important to note that the private sector schemes cannot run without minimum profit, so they have to make a number of exclusions from the schemes but the schemes have however been successful in providing the minimal medical benefits to the people, due to which to certain extent, the burden of costs at least for a few treatments is received.

When resources are available in surplus, then services can be rendered at low cost or free. Our government which has a pool of resources does not provide services free of cost, except in few cases.

The growth of health insurance depends on the cost, quality and quantity of services provided by the insurers. As economists always argue; that growth of any service depends on the supply and demand of that particular service; health insurance is also seen from that perspective. The changes in 'supply and demand' side will soon be noticed when more and more people will be forced to higher indebtedness due to further rise in health care services and has to make excessive out-of-pocket payments.

The concept of welfare state is far gone from the guidelines. Profit–motive has preoccupied our guidelines. Our government itself has retreated from the guidelines 'to stand by the people'. A vast population being below poverty level (75 per cent) and with the emergence of 'profit–motive' has forced our government to rethink before proposing any welfare schemes.

There is a need to spread health coverage among the poor, children, old, disabled and women since they are the most vulnerable section of our population. The role of government here comes into play. Proper allocation of resources is required to help the poor and the vulnerable. But this time not at the cost of quality and quantity services because the 'quality and quantity' always suffers when services are provided at subsidized rate.

Many researchers have suggested, social health insurance as the best way of health care financing, some authors go to the extent of making social health insurance as universal. The National Health Policy 2002 has declared such policy. To expect the best of all insurance providers is difficult because all have their own boundaries drawn, but as a beginning one can think of making health insurance compulsory in the organized sector, so that the families of the employees as well as their families are covered and benefited from the schemes. To allocate insurance in the unorganized sector is difficult, but at least schemes should be made in such a way that the poor in the organized sector and not only the wealthy section, can also benefit from them. And as long as the allocation of fund for the people in the unorganized sector is a problem, the people can benefit from the NGO operated schemes, by making these schemes more accessible and user friendly.

It won't be apt to say that private health insurance market does not provide any benefits to the people. The services they provide are charged in the form of premium; the government run schemes are also provided as against premium. Thus it can only be discouraged when our government can overcome with the pace of quality and quantity services that are provided by the private health insurers. Thus the solution to this private – government health insurance market debate is that both these organizations can work together. The private sector will look up to the cases of those who can afford the schemes, while the government can function for the poor and vulnerable for whom services are not available from the private sector and to whom the private insurers cannot provide any benefits at the cost of their own loss. The functioning of both public and private sector is seen as important means in the health insurance sector because it can make health services available for both rich and poor, and geographically. A means through which 'reasonable' distribution of health care services could be expected in the future. Thus to enhance effective utilization of health care services, health insurance coverage should be encouraged from all the parties.

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Appendix

Table 1

Information on Annual Premium Amount under Health Package: Health Guard of Bajaj Alliance, India, 2009

Age/Sum Insured (Rs.)	0-25yrs	26-40 yrs	41-45 yrs	46-55 yrs	56-60 yrs
	Premium amount (Rs.)				
100000	1254	1453	1862	2793	4275
150000	1882	2110	2727	4190	6413
200000	2338	2736	3591	5586	8550
300000	3306	3876	5054	6983	10688
400000	4332	5130	6517	10416	14667
500000	5244	6156	7980	12697	17879
750000	6688	7510	9736	15490	21812
1000000	8160	9163	11877	19757	27820

Source: www.bajajalliance.com

Table 2

Information on Annual Premium Amount under Health Package: Critical Illness of Bajaj Alliance, India, 2009

Age/Sum Insured (Rs.)	0-25yrs	26-35 yrs	36-40 yrs	41-45 yrs	46-50 yrs	51-55 yrs	56-60 yrs
	Premium amount (Rs.)						
100000	200	300	550	800	1200	1750	3000
300000	600	900	1650	2400	3600	5250	9000
500000	1000	1500	2750	4000	6000	8750	15000
1000000	2000	3000	5500	8000	12000	17500	30000

Source: www.bajajalliance.com

Table 3

Information on Premium Amount under SILVER Plan of Happy Family Floater Policy of Oriental Insurance Company, India, 2009

3.A. PRIMARY MEMBER PREMIUM					
Age/Sum Insured (Rs.)	**21-35 yrs**	**36-45 yrs**	**46-55 yrs**	**56-60 yrs**	**61-65 yrs**
	Premium amount (Rs.)				
Lower Limit Amount 100000	1320	1580	2470	3520	5240
Upper Limit Amount 500000	5200	6210	10400	15090	22900

Source: The Oriental Insurance Company Limited, 2009.

3.B. FAMILY MEMBER PREMIUM (PER PERSON)								
Sum Insured (Rs.)	**Domiciliary Hospitalization limit**	**3mths-20yrs**	**21-35 yrs**	**36-45 yrs**	**46-55 yrs**	**56-60 yrs**	**61-70 yrs**	**Above 70 yrs**
		Premium amount (Rs.)						
Lower Limit Amount 100000	Lower Limit 10000	240	260	320	490	700	1310	1760
Upper Limit Amount 500000	Upper Limit 25000	940	1040	1240	2080	3020	5730	7970

Source: The Oriental Insurance Company Limited, 2009.

3.C. PERSONAL ACCIDENT					
Sum Insured	**100000**	**200000**	**300000**	**400000**	**500000**
Premium per Person	60	120	180	240	300

Source: The Oriental Insurance Company Limited, 2009.

Table 4

Information on Premium Amount under GOLD Plan of Happy Family Floater Policy of Oriental Insurance Company, India, 2009

4.A. PRIMARY MEMBER PREMIUM					
Age/Sum Insured (Rs.)	**21-35 yrs**	**36-45 yrs**	**46-55 yrs**	**56-60 yrs**	**61-65 yrs**
	Premium amount (Rs.)				
Lower Limit Amount 600000	7140	8520	14210	20600	31220
Upper Limit Amount 1000000	11850	14150	23640	34280	51980

Source: The Oriental Insurance Company Limited, 2009.

4.B. FAMILY MEMBER PREMIUM (PER PERSON)								
Sum Insured (Rs.)	**Domiciliary Hospitalization limit**	**3mths-20yrs**	**21-35 yrs**	**36-45 yrs**	**46-55 yrs**	**56-60 yrs**	**61-70 yrs**	**Above 70 yrs**
		Premium amount (Rs.)						
Lower Limit Amount 600000	50000	1290	1430	1700	2840	4120	7800	10860
Upper Limit Amount 1000000	50000	2130	2370	2830	4730	6860	13000	18080

Source: The Oriental Insurance Company Limited, 2009.

4.C. PERSONAL ACCIDENT					
Sum Insured	**200000**	**400000**	**600000**	**800000**	**1000000**
Premium per Person	120	240	360	480	600

Source: The Oriental Insurance Company Limited, 2009.

Table 5

Distribution of Sample size by States in India, 2005-06

STATES	T Total sample Size	Insured Sample Size
Jammu and Kashmir	268	26
Himachal Pradesh	82	9
Punjab	980	116
Uttaranchal	243	23
Haryana	601	91
Delhi	1266	177
Rajasthan	1669	186
Uttar Pradesh	3925	133
Bihar	1222	32
Sikkim	14	2
Arunachal Pradesh	33	4
Nagaland	44	1
Manipur	67	7
Mizoram	51	2
Tripura	70	2
Meghalaya	71	1
Assam	597	39
West Bengal	2889	453
Jharkhand	678	89
Orissa	706	54
Chhattisgarh	498	59
Madhya Pradesh	1836	256
Gujarat	2243	398
Maharashtra	5138	630
Andhra Pradesh	3003	222
Karnataka	2581	305
Goa	95	13
Kerala	1027	115
Tamil Nadu	3670	259
TOTAL	35567	3704

Source: Computed from Household data file, NFHS-III, 2005-06

Table 6
Percentage distribution of background characteristics by type of facilities, Urban India, 2005-06

Characteristics	TYPE OF FACILITIES			
	Public Facility (percent)	Private Facility (percent)	Non-Public/Private (percent)	Sample Size
Health Insurance Status				
Not Insured	29.6	69.4	1.0	4123
Insured	26.9	67.5	5.7	36688
Education Levels				
Illiterate	30.4	65.8	3.8	8962
Primary	34.1	61.1	4.8	4992
Secondary	26.9	67.5	5.6	20167
Higher	18.3	75.5	6.1	6692
Type of Caste				
Others	25.9	69.0	5.1	32736
Scheduled Caste	35..2	58.1	6.7	1136
Scheduled Tribe	31.6	63.1	5.3	6945
Religion				
Hindu	26.2	68.5	5.3	31221
Muslim	30.5	64.3	5.2	6730
Christian	38.3	58.8	2.9	1329
Others	21.7	73.9	4.4	1538
Husband's Occupation				
Not Working	31.9	62.0	6.1	668
Skilled and Unskilled Manual	29.6	65.1	5.3	19090
Non Manual	22.3	71.5	6.1	10744
Wealth Index				
Poorest	42.9	52.8	4.4	1008
Poorer	35.7	59.1	5.2	2341
Middle	37.9	56.7	5.3	5297
Richer	31.7	63.4	4.9	11473
Richest	20.1	74.5	5.4	20696
TOTAL	27.1	67.7	5.2	40818

Source: Computed from NFHS-III data files, 2005-06