International Journal of Advanced Research in Management and Social Sciences

ISSN: 2278-6236
Impact Factor: 5.313

FINANCIAL PROTECTION IN HEALTH INSURANCE SCHEMES: A COMPARATIVE ANALYSIS OF MEDICLAIM POLICY AND CHAT SCHEME IN INDIA

Dr. Pranam Dhar*

Sudipta Halder**

Abstract: *Household out-of-pocket spending for health care occupies 90 per cent of private health expenditure in the year of 2007 in India. This alone may push 2.2 per cent of the population below poverty line each year; 24 per cent of the people fall below the poverty line because they are hospitalized; 28 per cent in rural and 24 per cent in urban areas of those who had illnesses, have cited financial constraint as the reason for not having used health care. Further, there is a growing preference for private health care where more than 80 per cent of the people prefer to utilize private sector health care facilities. Despite massive and enormous efforts to scale up health insurance as a mechanism to reduce financial burden due to health care, the health insurance penetration is still very low in India. Let us look at one fundamental question is this regard, which is the main focus of this study : Do prevailing health insurance schemes offer necessary financial protection during illness? To the knowledge of this author, there has been no study till date that has examined whether prevailing health insurance schemes in India meet the preferences of clients and hence offer necessary financial protection during illness. The present study has examined the above question by analyzing the level of financial protection to low income people during illness in 'private health insurance' and 'people's preferred health insurance', by exploring the effective financial protection (reimbursement) of the pro-poor version of the Mediclaim policy in comparison to the 'CHAT scheme'.*

Keywords: *Health Care, Health Insurance, Meclaim, CHAT Scheme.*

*Associate Professor & Head, Department of Commerce & Management, West Bengal State University.

**Research Scholar, Department of Commerce & Management, West Bengal State University.

1.0. INTRODUCTION

Household out-of-pocket spending for health care occupies 90 per cent of private health expenditure in the year of 2007 in India (WHO 2010). This alone may push 2.2 per cent of the population below poverty line each year; 24 per cent of the people fall below the poverty line because they are hospitalized (Peter et al. 2002); 28 per cent in rural and 24 per cent in urban areas of those who had illnesses, have cited financial constraint as the reason for not having used health care (GoI 2005a). Further, there is a growing preference for private health care where more than 80 per cent of the people prefer to utilize private sector health care facilities (GoI 2005a). Despite massive and enormous efforts to scale up health insurance as a mechanism to reduce financial burden due to health care, the health insurance penetration is still very low in India. In the financial year 2008–09, voluntary private health insurance schemes had covered only 32.7 million individuals (GoI 2009), which accounts for around three per cent of the Indian population.

There can be several reasons for such a low level of health insurance uptake in India, among which the following three arguments are usually advanced: (a) low insurance awareness among the people; that is, people do not necessarily know what insurance, especially the formal insurance system, exactly is and why it is important for them to buy health insurance, (b) the poor are too poor to pay the premium because a majority of Indians are in the low and middle income groups and (c) insurance companies are not following aggressive business strategies to spread individual health insurance in the informal sector, mainly because the absence of proper data on morbidity and health expenditure related issues may lead to market failures such as adverse selection and moral hazard. These aspects are widely discussed in various academic and policy circles in India. If we assume for a while that the above-mentioned constraints are resolved, can we expect that people would buy health insurance in the present context? To answer this question, let us also look at another fundamental question which is the main focus of this study : Do prevailing health insurance schemes offer necessary financial protection during illness? To the knowledge of this author, there has been no study till date that has examined whether prevailing health insurance schemes in India meet the preferences of clients and hence offer necessary financial protection during illness.

In this study, we examined the above question by analyzing the level of financial protection to low income people during illness in 'private health insurance' and 'people's preferred health insurance', by exploring the effective financial protection (reimbursement) of the pro-poor version of the Mediclaim policy in comparison to the 'CHAT scheme'. The rest of the article is organized as follows. Section 2 explains the features of the CHAT scheme and Mediclaim policy. Section 3 describes the data and methods. Section 4 presents the results and the last section discusses the findings and points out the implications and limitations of the study.

1.1. CHAT Scheme and Mediclaim Policy

Many authors agree that if the poor are to accept and purchase insurance, it must respond to their needs (Ahuja and Jutting 2004; Gumber 2000; Leftley 2005; Radwan 2005). An appropriate health insurance scheme must respond to clients' priorities, and cover affordable benefit package (Danis et al. 2007) to make it attractive. The responsiveness of health insurance to prospective clients' perceived priorities would be positively associated with willingness to join such a system and pay for it (De Allegri et al. 2006; Schone and Cooper 2001). Further, we have evidence that people have strong preference for various health insurance benefits (Dror et al. 2007a) and do expect value for money from their enrolled scheme.

The common belief that people who are illiterate and innumerate may not be able to articulate their preferences for health insurance packages had been falsified by results of a simulation experiment called 'Choosing Health Plans All Together' (CHAT) that was conducted among the poor in India to elicit their preferences for health insurance benefits. CHAT is a simulation exercise designed to allow persons to define their own health insurance benefit package within the constraints of limited resources. It deals with the fundamental economic problem of reconciliation of limited resources and unlimited desires (for more details of CHAT tool, see Danis et. al. 2007). The CHAT tool used in India was a revised version of the original CHAT tool developed and tested in the USA (Danis et al. 2002, 2004; Goold et al. 2005)

Keefe and Goold 2004) which was then adapted to the Indian situation. It revealed that the poor will make a careful selection of benefits if they get an opportunity to reveal their preferences (Danis et al. 2007; Dror et al. 2007a). In the CHAT exercise, the participants

rationally select preferred health insurance benefits from 10 pre-defined health insurance benefits at basic (B), medium (M) and high (H) level for a hypothetical health insurance package, given a limited budget. The 10 benefits are: drugs (D), out-patient care (OP), in-patient charges (IP), tests (T), dental care (DEN), medical equipment (ME), preventive care (P), maternity care (M), indirect costs (IC) and mental healthcare (MH). Further, corresponding to the level of selected benefits, the health insurance scheme would reimburse 50 per cent, 75 per cent and 100 per cent of the expenditures at basic, medium and high levels, respectively. During the CHAT exercise that was conducted in rural India for the first time in November–December 2005, the participants revealed their preferences for health insurance benefits resulting in the composition of various health insurance packages. The CHAT exercise revealed that people have strong preferences for specific benefit packages and are able to design various viable health insurance schemes within their budget constraints. Among the several preferred hypothetical health insurance packages designed by low income communities during the CHAT exercise in India, the present study considered the highly preferred CHAT health insurance scheme comprising of only five major health care benefits, viz., hospitalization (In-Patient) charges (IP), consultation (during out-patient visits) charges (OP), tests and image (T), drugs prescribed (D) and indirect costs incurred as wage loss and travel costs of patient and caring person/attendant (IC). In short, the CHAT scheme consists of IP (B), OP (B), D (B), T (B) and IC (B), where:

1. **IP (B)** = Hospitalization charges at basic level (50 per cent)
2. **OP (B)** = Consultation charges at basic level (50 per cent)
3. **D (B)** = Tests (Lab and Image) at basic level (50 per cent)
4. **T (B)** = Drugs (prescribed) at basic level (50 per cent)
5. **IC (B)** = Indirect costs at the rate of INR 50 per day of hospitalization (wage loss and travel costs of patient and caring person/attendant)

As already mentioned, the selected health insurance benefit at basic level (B) and high level (H) under the CHAT scheme would reimburse 50 per cent and 100 per cent of the incurred health expenditure, respectively. However, under the benefit of indirect cost, the reimbursement at basic level is INR 50. In short, there is no ceiling on reimbursement

(except in the case of indirect costs) in the CHAT scheme, but, there is a co-insurance rate and it is 50 per cent at the basic level (B) and zero per cent at higher levels (H).

The Mediclaim policy and the *Jan Arogya* policy, of the four public sector insurance companies (viz, National Insurance Company, New India Assurance Company, United Insurance Company, and Oriental Insurance Company), are the two major health insurance schemes available in India. Since the individual Mediclaim policy is the dominant among the prevailing health insurance schemes in terms of supply and demand in India, and is being supplied by the four public sector general insurance companies since 1987, we have taken the Mediclaim policy as the representative commercial scheme in the present study. Moreover, health insurance in India is generally equated with the Mediclaim policy as it is the oldest and relatively most popular one and is considered to be more comprehensive than others. In India, none of the existing schemes covers the out-patient care expenses; apparently, the Mediclaim policy is basically a hospitalization (in-patient) scheme. With the privatization of the insurance market in the country in 2000, many private sector players entered it, breaking the monopoly of the public sector general companies. Their health insurance products are similar to the Mediclaim policy. Currently, apart from the four public sector companies, more than 12 private sector general insurance companies provide health insurance schemes. The sum insured under the Mediclaim policy ranges from INR 30,000 to INR 500,000 and the premium varies according to the amount of insurance coverage bought by clients at the time of buying.

Given the low per capita income of INR 23,222 ($550) annually at current prices during the year 2004–05 (GoI 2005b), it can be inferred that the ability of the majority of Indians to pay is poor; they might prefer to buy a small amount of health insurance coverage. Moreover, many 'willingness to pay' studies in India (Mathiyashakan 1998; Dror et al. 2007) revealed that the average 'willingness to pay' for health insurance by rural Indians is around INR 100 per annum. In fact, after adjusting with the age factor, the annual premium of the Mediclaim policy for the minimum amount of insurance coverage of INR 30,000 is in the range INR 500–600. Therefore, we can expect that if the poor buy a Mediclaim policy, they would opt for the minimum coverage of INR 30,000. Moreover, by taking INR 30,000 as the insured amount under the Mediclaim policy, we can expect that the findings of this study can be transferred to the context of the recently introduced *Rashtriya Swasthya Bima*

Yojana (RSBY)—a health insurance scheme by the government of India for the BPL population- offers coverage for INR 30,000 per year (GoI 2010). Hence, this coverage level is taken as the 'pro-poor version' of the Mediclaim policy and this version is what is referred to when the term Mediclaim policy is used in the rest of this study.

1.2. Brief Review of the Available Literature Found on the Related Area

According to Richard L. Kaplan[1], in the context of changing demographics, the increasing cost of health care services, and continuing federal budgetary pressures, Medicare has become one of the most controversial federal programs.

As per the study made by **Bernard S. Black, Charles Silver, David A. Hyman, William M. Sage[2],** using a comprehensive database of closed claims maintained by the Texas Department of Insurance since 1988, this study provides evidence on a range of issues involving medical malpractice litigation, including claim frequency, payout amounts, defense costs, and jury verdicts.

In the opinion of **Jeff Strnad[3],** public health scholars and practitioners in several countries have called for a broad system of taxes on unhealthy foods, possibly combined with subsidies for certain healthy foods. The typical motivation for these fat taxes is the public health perspective, the idea that it is socially valuable to make health outcomes better regardless of how individuals might trade off risky dietary behaviors with those outcomes.

As per the study of **Catherine M. Sharkey[4],** his study is the first to explore an unintended crossover effect that may be dampening the intended effects of caps. It posits that, where non-economic damages are limited by caps, plaintiffs' attorneys will more vigorously pursue, and juries will award, larger economic damages, which are often unbounded. Implicit in such a crossover effect is the malleability of various components of medical

[1]**Richard L. Kaplan,** 'Top Ten Myths of Medicare', University of Illinois College of Law July 17, 2012, *The Elder Law Journal, Vol. 20, pp. 1-32, 2012*.

[2]**Bernard S. Black, Charles Silver, David A. Hyman, William M. Sage[2],** 'Stability, Not Crisis: Medical Malpractice Claim Outcomes in Texas, 1988-2002', *Journal of Empirical Legal Studies, Vol. 2, pp. 207-259, 2005*, *Columbia Law and Economics Working Paper No. 287*, *U Illinois Law & Economics Research Paper No. LE05-002*, *U of Texas law, Law and Econ Research Paper No. 030*.

[3]**Jeff Strnad,** 'Conceptualizing the 'Fat Tax': The Role of Food Taxes in Developed Economies', Stanford Law School, July 2004, *Stanford Law and Economics Olin Working Paper No. 286.*

[4]**Catherine M. Sharkey,** 'Unintended Consequences of Medical Malpractice Damages Caps', NYU School of Law, *NYU Law Review, Vol. 80, pp. 391-512, May 2005*.

malpractice damages, which often are considered categorically distinct, particularly in the tort reform context. This Article challenges this conventional wisdom.

So far as the study is concerned, **Jennifer Prah Ruger[5],** stated that the US and numerous developing countries do not provide universal health insurance coverage to their populations. Academic approaches to health insurance have typically adopted a neo-classical economic perspective, assuming that individuals make rational decisions to maximize their preferred outcomes, and businesses (including insurance companies) make rational decisions to maximize profits. In this approach, individuals who are risk-averse will purchase health insurance to reduce variation in the costs of health care between healthy and sick periods. This article is part of an alternative approach to health and social justice, offered here and elsewhere, that builds on and integrates Aristotle's political theory and Amartya Sen's capability approach.

As per the study of **Elizabeth Warren, Teresa A. Sullivan, Melissa B. Jacoby[6],** it explores the financial impact of medical problems, using data from Phase III of the Consumer Bankruptcy Project, a survey of 1,974 individual bankruptcy petitioners conducted during the first quarter of 1999 in eight federal judicial districts. Previous studies considering medical problems and bankruptcy in the United States are summarized, although the methods used and results obtained are not directly comparable with the current findings.

in the opinion of **Tom Baker[7],** lost in the recent efforts to take political advantage of (or explain away) the rapid rise in liability insurance premiums is any real attempt to understand the underwriting cycle, why it is so severe in medical malpractice insurance, and what it might mean for the ability of malpractice liability to deliver on its risk distribution, loss prevention, and corrective justice objectives.

David M. Dror[8] opined in his study that, limited funding dictates that health insurance for low-income persons would compensate only part of healthcare needs. Existing health

[5]**Jennifer Prah Ruger[5],** 'The Moral Foundations of Health Insurance'**,** University of Pennsylvania, Quarterly Journal of Medicine, Vol. 100, No. 1, pp. 53-57, January 2007.

[6]**Elizabeth Warren, Teresa A. Sullivan, Melissa B. Jacoby[6],** 'Medical Problems and Bankruptcy Filings', *Norton's Bankruptcy Adviser, May 2000* .

[7]**Tom Baker[7],** 'Medical Malpractice and the Insurance Underwriting Cycle'**,** Depaul Law Review, Vol. 54, May 2005.

[8]**David M. Dror[8],** 'Why 'One-Size-Fits-All' Health Insurance Products are Unsuitable for Low-Income Persons in the Informal Economy in India', *Asian Economic Review, Vol. 49, No. 1, 2007.*

insurance products in India are too restrictive to be attractive to low-income & rural populations.

As per the study of **David A. Hyman, Charles Silver**[9]**,** health care providers and tort reformers claim that the medical malpractice litigation system is rife with behaviors that are irrational, unpredictable, and counter-productive. They attack civil juries, asserting that verdicts are skyrocketing without reason, are highly variable, and bear little or no relation to the merits of plaintiffs' claims. It is possible to reform the liability system to address these shortcomings, but tort reform proposals like caps on non-economic damages and attorneys fees will not do so. The goal of these proposals is to reduce insurance prices by making the system less remunerative for claimants. If implemented, these measures will predictably worsen the problem of under-compensation, and weaken providers' incentives to protect patients from avoidable perils.

Robert Rich[10] opined in his study that**,** ever major western democracy is currently engaged in renegotiation of the social contract, which serves as the foundation for the social welfare state.

1.3. Identification of the Ultimate Research Vacuum

After the minute study of the detailed literature review as explained above, it was found that, as yet, not extensive study was made on the positive and negative sides of the medical benefits receivable by the medical insurance policy holders while getting treatment in a public/private hospital/nursing home.

1.4. Methodology of the Present Study

1.4.1. Collection of Data

In the study, data is collected from **100** respondents with the help of structured questionnaire about the actual harassment faced by them after having mediclaim policy while getting treatment in a public/private hospitals/nursing home.

1.4.2. Source of Data

The data were collected from the respondents treated in command hospital DISHA, DESUN Hospital, AMRI & CMRI based on convenient supplying although uniform number of

[9]**David A. Hyman, Charles Silver,** 'Medical Malpractice Litigation and Tort Reform: It's the Incentives, Stupid', *Vanderbilt Law Review, Vol. 59, p. 1085, 2006.*

[10]**Robert Rich** opined in his study that**,** 'Health Policy, Health Insurance, and the Social Contract'**,** *Comparative Labor Law and Policy Journal, Vol. 21, pp. 397-421, Winter 2000.*

questionnaires were served to the parties treated in each hospital/nursing home and finally we got **100** filled up questionnaires from all the respondents. Besides, different secondary data like books and journals, Govt. and Non-Govt. Reports and periodicals, and secondary data published by different websites, mainly IRDA Website were taken into consideration for the study.

1.4.3. Tools for Analysis

Mainly descriptive statistics, Factor Analysis and Multiple Regression Models were used for analysis. PASW Version 18.0 was used for the study.

1.5. Identification of Eligible Illness Episodes and Calculation of Reimbursement under the Mediclaim Policy and CHAT Scheme

In this regard, the eligible illness episodes for reimbursement from the reported illness episodes in the household survey were identified and listed separately under Mediclaim policy and CHAT scheme for reimbursement. It needs to be mentioned here that neither the Mediclaim policy nor the CHAT scheme directly list the names or types of illness episodes that are covered/eligible under the respective scheme, but they do list the type of health insurance benefits covered therewith, say, for example, in-patient care, out-patient consultation expenses, drugs, etc. Therefore, we have examined the health insurance packages covered by each insurance scheme and compared these with morbidity conditions of the individuals who participated in the household survey.

Subsequently, the study has identified and listed the illness episodes that would be eligible for reimbursement from each insurance scheme according to the benefits offered by each and the required benefits for reimbursement by each reported illness episode. For example, the Mediclaim policy offers only in-patient care, so those illness episodes requiring in-patient care was identified and listed as the ones eligible for reimbursement from the Mediclaim policy. In the rest of the article, we use the term 'eligible illness episodes' to denote those illness episodes that are eligible for reimbursement from the respective insurance scheme. Apart from this, other eligibility conditions in terms of co-insurance and ceilings are also examined to determine the amount of reimbursement. Since the Mediclaim policy does not cover all types of expenses due to illness, and there is no direct listing of which illnesses are being covered in the policy prospectus, this study has identified the

illness episodes that are covered based on the 'inclusion' and 'exclusion' of benefits in the Mediclaim policy.

As per the specifications, it covers all direct expenses due to 'hospitalization' (in patient), 30 days pre-hospitalization and 60 days post-hospitalization related to 'out-patient' expenses. It excludes all expenses related to 'out-patient' care other than the above and maternity care. Therefore, we have identified the eligible illness episodes for reimbursement from the Mediclaim policy as those illness episodes that require hospitalization but do not include maternity care. This is what has been termed 'Mediclaim eligible illness episodes' throughout this study.

1.6. Calculation of Total Health Expenditure for Estimating Reimbursement

In this regard, the total health expenditure and reimbursement for reported illness episodes was calculated. We estimated the level of reimbursement under each insurance scheme, in both absolute and relative terms, for eligible illness episodes. To analyze in absolute terms, we compared the mean total health expenditure with the mean reimbursement amount for eligible illness episodes under each of the insurance schemes. The proportion of reimbursement to total health expenditure has also been calculated to analyze reimbursement in relative terms. The following formulae are used for the calculation of total health expenditure (total cost) and the mean value of cost incurred during each illness episode.

1. **Total Health Expenditure** = Hospitalization charges (IP) + Consultation charges (OP) + Drug (D) expenses (prescribed) + Test (T) expenses + Indirect Costs (IC);

2. **Mean Health Expenditure of eligible illness episodes under each insurance scheme** = Total health expenditure for eligible illness episodes under each insurance scheme/Total number of eligible illness episodes.

The following algorithm is used for the calculation of reimbursement amount from the Mediclaim policy:

Amount of reimbursement for Mediclaim policy = (hospitalization charges (IP) + consultation charges (OP) + drugs (D) expenses (prescribed) + test (T) expenses) for the Mediclaim eligible illness episodes with a ceiling of INR 30,000. Like the Mediclaim policy, the CHAT scheme also does not directly mention the illnesses covered but only mentions the health care benefits covered. Illness episodes that are eligible for reimbursement under the CHAT

scheme have been identified on the same basis as was done for the Mediclaim policy. We use the following formula to calculate reimbursement under the CHAT scheme.

Amount of reimbursement for CHAT scheme = 50 per cent of ([IP] + [OP] + [D] + [T]) + (number of days hospitalized × INR 50 for 'CHAT Scheme 1 eligible illness episodes').

1.7. Detailed Data Analysis

The data collected with the help of structured questionnaire from the respondents is being presented with the help of different tables, charts, diagrams and then being analyzed with the help of different statistical and mathematical tools which are being presented below :

1.7.1. Education of the Respondents

The educational qualifications of the respondents is being presented through the following table:

Table – 1 : Education of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
10	2	2.0	2.0	2.0
10+2	4	4.0	4.0	6.0
Graduate	30	30.0	30.0	36.0
Post Graduate	58	58.0	58.0	94.0
Others	6	6.0	6.0	100.0
Total	100	100.0	100.0	

Source: Calculated from Primary Data collected.

From the above table it is clear that among the respondents, **38** were post graduate and **30** of them are graduates. So, it is clear that academic ignorance could never be a problem so far as harassment is concerned.

1.7.2. Occupation of the Respondents

The occupations of the respondents is being presented through the following table :

Table – 2 : Occupation of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Service	41	41.0	41.0	41.0
Business	38	38.0	38.0	79.0
Others	21	21.0	21.0	100.0
Total	100	100.0	100.0	

Source: Calculated from Primary Data collected.

From the above table it is seen that most of the respondent were servicemen who were 41 in numbers out of 100, followed by 38 are businessmen and 21 from other occupations.

Therefore it was clear that most of the respondent were financially sound, in spite of which they were harassed.

1.7.3. Marital Status of the Respondents

The Marital Status of the respondents is being presented through the following table:

Table – 3 : Marital Status of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Married	45	45.0	45.0	45.0
Unmarried	55	55.0	55.0	100.0
Total	100	100.0	100.0	

Source: Calculated from Primary Data collected.

Most of the respondents were unmarried (55 out of 100) which had no direct relation with the harassment in treatment.

Table – 4 : Gender of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	72	72.0	72.0	72.0
Female	28	28.0	28.0	100.0
Total	100	100.0	100.0	

Source: Calculated from Primary Data collected.

Further, from the table 4.4 of the study it is clear that most of the respondents (72 out of 100) were male, which means that awareness about medical insurance is very poor among the female respondents till date.

1.7.4. Monthly Income of the Respondents

The Monthly Income of the respondents is being presented through the following table :

Table – 5 : Monthly Income of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Nil	17	17.0	17.0	17.0
<10,000	8	8.0	8.0	25.0
10,000-20,000	10	10.0	10.0	35.0
20,001-30,000	22	22.0	22.0	57.0
>30,000	43	43.0	43.0	100.0
Total	100	100.0	100.0	

Source: Calculated from Primary Data collected.

From the above table it clearly indicates that 43% of the total respondent were in the highest income bracket i.e., above Rs.30,000.00/month. Therefore it was clear that monthly income could never be a problem in case of harassment in treatment.

1.7.5. Number of Family Members of the Respondents

The number of family members of the respondents is being presented through the following table :

Table – 6 : Number of Family Members of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
<=2	6	6.0	6.0	6.0
3	58	58.0	58.0	64.0
4	26	26.0	26.0	90.0
>4	10	10.0	10.0	100.0
Total	100	100.0	100.0	

Source: Calculated from Primary Data collected.

From the above table it depicts that most of the respondents have number of family members of <= 4. So, it is evident that proper care could be taken for their medical treatment and insurance.

1.7.6. Caste of the Respondents

The Caste of the respondents is being presented through the following table:

Table – 7 : Caste of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
General	75	75.0	75.0	75.0
SC	18	18.0	18.0	93.0
ST	4	4.0	4.0	97.0
OBC	1	1.0	1.0	98.0
Others	2	2.0	2.0	100.0
Total	100	100.0	100.0	

Source: Calculated from Primary Data collected.

From the above table it is clear that 75 per cent of the respondents belong to General Caste and rest of the respondents belong to other castes.

1.7.7. Suffering of the Respondents

The suffering of the respondents is being presented through the following table:

Table 8 : Suffering of respondent from any serious disease or not

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	63	63.0	63.0	63.0
No	37	37.0	37.0	100.0
Total	100	100.0	100.0	

Source: Calculated from Primary Data collected.

63 of the respondents replied that they had suffering from serious diseases like Heart Attack, Renal Failure, Cerebral Attack, Blindness, Cataract, Neurological Problem and Diabetes related problems, whereas 37 said their problems were mild and not serious.

1.7.8. Ownership of Medical Insurance of the Respondents

The ownership of Medical Insurance of the respondents is being presented through the following tables :

Table 9 : Ownership of Medical Insurance for the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	98	98.0	98.0	98.0
No	2	2.0	2.0	100.0
Total	100	100.0	100.0	

Source: Calculated from Primary Data collected.

98 per cent of the respondents said that they had medical insurance whereas only 2 per denied.

Table 10 : Name of Company where Mediclaim is done

	Frequency	Percent	Valid Percent	Cumulative Percent
New India Assurance	24	24.0	24.0	24.0
National Insurance	30	30.0	30.0	54.0
Appolo Munich	7	7.0	7.0	61.0
SBI	12	12.0	12.0	73.0
LIC	7	7.0	7.0	80.0
Tata AIG	15	15.0	15.0	95.0
Others	5	5.0	5.0	100.0
Total	100	100.0	100.0	

Source: Calculated from Primary Data collected.

Out of the medical insurance policy holders, 24 were the policy holder of NEW INDIA ASSUREANCE; 30 were NATIONAL INSURANCE; 7 were of APPOLO MUNICH; 12 were of SBI; 7 were of LIC; 15 were of TATA AIG; 5 were have the policy with other companies. Therefore it was clear that 51 respondent had mediclaim policy with GOVERNMENT Organizations whereas 49 were having policies with PRIVATE Organizations.

Further, out of 98 owners of medical insurance, 51 per cent were the holders of Govt. Medical Insurance Policy and 49 per cent were the holders of Private Medical Insurance Policy.

Table 11 : Nature of Company where Medical Insurance is done

	Frequency	Percent	Valid Percent	Cumulative Percent
Government	51	51.0	51.0	51.0
Private	49	49.0	49.0	100.0
Total	100	100.0	100.0	

Source: Calculated from Primary Data collected.

1.7.9. Types of Hospitals/Treatment Centres for the Treatment of the Respondents

The types of hospitals/treatment centres for the treatment of the respondents are being presented through the following table:

Table 12 : Admission of respondent in Private Hospital or Nursing Home

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	63	63.0	63.0	63.0
No	25	25.0	25.0	88.0
Not Applicable	12	12.0	12.0	100.0
Total	100	100.0	100.0	

Source: Calculated from Primary Data collected.

63 of the respondents said that they were admitted in private hospitals and nursing homes and 25 respondents said that they were admitted in Government hospitals during their diseases and this question was not answered by 12 respondents.

1.7.10. Proper Treatment of the Respondents

The types of proper treatment of the respondents are being presented through the following table:

Table 13 : Proper Treatment of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	38	38.0	38.0	38.0
No	37	37.0	37.0	75.0
Not Applicable	25	25.0	25.0	100.0
Total	100	100.0	100.0	

Source: Calculated from Primary Data collected.

Only 38 of the total respondent said that in spite of having mediclaim policy after having paid proper premium in due course they were properly treated by that hospitals/nursing home but the reverse opinion was placed by 37 respondents and 25 respondents remain silent in this regard.

1.7.11. Financial Support for Treatment through Medical Insurance by the Respondents

The financial support for treatment through medical insurance by the respondents is being presented through the following table:

Table 14 : Financial Support for treatment through Medical Insurance

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	15	15.0	15.0	15.0
No	60	60.0	60.0	75.0
Not Applicable	25	25.0	25.0	100.0
Total	100	100.0	100.0	

Source: Calculated from Primary Data collected.

Only 15 respondents stated that they got proper financial support from medical insurance after the treatment was over and all of them were eye patient, but majority of the other respondents i.e., 60% respondents said that they could not proper financial represent from mediclaim after having incurred huge amount of medical expenses because of the fact that either the reimbursement process was delayed due to the negligence of the agent or there were lots of technicalities which are not clarified by the agents or office stuff at the time of daily mediclaim policies, whereas 25 respondents remain silent in this regard.

1.7.12. Harassment from Medical Insurance Officials for Submitting Claim

The harassment from medical insurance officials for submitting claims by the respondents are being presented through the following table:

Table 15 : Harassment from Medical Insurance Officials for Submitting Claim

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	52	52.0	52.0	52.0
No	18	18.0	18.0	70.0
Not Applicable	30	30.0	30.0	100.0
Total	100	100.0	100.0	

Source: Calculated from Primary Data collected.

52 of the respondents stated that they and there relatives were harassed by the office staffs of the Insurance office, 18 said they did not face this sort of harassment and 30 respondents said that they could not feel it as they meet into polices of Cashless benefits.

1.7.13. Premium Paying Years by the Respondents

The Premium Paying Years by the respondents are being presented through the following table:

Table 16 : Premium Paying Years for Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
<2 Years	3	3.0	3.0	3.0
2-3 Years	14	14.0	14.0	17.0
3-4 Years	25	25.0	25.0	42.0
4-5 Years	22	22.0	22.0	64.0
>5 Years	36	36.0	36.0	100.0
Total	100	100.0	100.0	

Source: Calculated from Primary Data collected.

25 respondents said that they were paying premium for 3-4 years, 36 respondents said that they were paid premium for more than 5 years, 22 respondents paid it for 4-5 years, 14 respondents were paying premium for 2-3 years and only 3 respondents said that they were paying for less than 2 years. This proves that in spite of being old or very old policy holders the respondents were harassed at the time of treatment while getting back medical expenses in the form of claim or reimbursement, although this was not the case of policy holders having applied for cashless benefits.

1.8. Statistical Tests on the Primary Data Collected

The results of the statistical tests and analysis have been presented through the following tables :

Table 17 : Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Education of the respondents	100	2	7	4.68	.89
Occupation of the respondents	100	1	3	1.80	.77
Marital Status of the respondents	100	1	2	1.55	.50
Gender of the respondents	100	1	2	1.28	.45
Monthly Income of the respondents	100	1	5	3.66	1.51
Number of Family Members of the respondents	100	1	4	2.40	.75
Caste of the respondents	100	1	5	1.37	.79
Ownership of Mediclaim for the respondents	100	1	2	1.02	.14
Valid N (listwise)	100				

Source: Calculated from Primary Data collected.

1.8.1. Correlation Coefficient between the Nature of Company where the Medical Insurance is done and harassment from the officials of those companies for submitting the claims

The Correlation Coefficient between the Nature of Company where the Medical Insurance is done and harassment from the officials of those companies for submitting the claims is being presented through the following table :

Table 18 : Correlations

		Nature of Company where Medical Insurance is done	Harrasment from Medical Associatives from Submitting Claim
Nature of Company where Medical Insurance is done	Pearson Correlation	1.000	.051
	Sig. (2-tailed)	.	.617
	N	100	100
Harrasment from Medical Associatives from Submitting Claim	Pearson Correlation	.051	1.000
	Sig. (2-tailed)	.617	.
	N	100	100

Source: Calculated from Primary Data collected.

Here, we have calculated correlation coefficient between the nature of company where the medical insurance was done and the harassment from the officials of those companies for submitting the claims as per the data received from the respondents and this correlation co-efficient is only **0.051** which is very negligible and it proves that there is no such correlation between the two.

1.8.2. Correlation Coefficient between the Sufferings from Serious Diseases and harassment from the officials of medical insurance companies for submitting the claims

Table 19 : Correlations

		Harassment from Medical Associative from Submitting Claim	Suffering of respondent from any serious disease or not
Harassment from Medical Associatives from Submitting Claim	Pearson Correlation	1.000	.781
	Sig. (2-tailed)	.	.000
	N	100	100
Suffering of respondent from any serious disease or not	Pearson Correlation	.781	1.000
	Sig. (2-tailed)	.000	.
	N	100	100

** Correlation is significant at the 0.01 level (2-tailed).

Further the correlation between sufferings from serious diseases and harassment for submitting medical Insurance is also calculated and the correlation comes out to **0.781** which is very significant and its proves that there is a strong correlation between the two at 1**%** level of significance.

1.8.3. Correlation Coefficient between premium paying years and the financial support for treatment through Medical Insurance

Table 20 : Correlations

		Financial Support for treatment through Medical Insurance	Premium Paying Years for Respondents
Financial Support for treatment through Medical Insurance	Pearson Correlation	1.000	-.306
	Sig. (2-tailed)	.	.002
	N	100	100
Premium Paying Years for Respondents	Pearson Correlation	-.306	1.000
	Sig. (2-tailed)	.002	.
	N	100	100

** Correlation is significant at the 0.01 level (2-tailed).

Further the correlation coefficient between premium paying years and the financial support for treatment through medical insurance is also calculated and the correlation coefficient comes out **0.306** which is also significant at **1%** level of significance.

1.8.4. Results of Factor Analysis

Further we have decided to analyze the causes or factors of harassments for the medical insurance policy-holders while the treatment as well as while getting the claim reimbursed and finally we took 9 variables viz. :

1. Name of company
2. Nature of the company
3. Suffering from any serious disease or not
4. Admission in public/private hospital/nursing home
5. Proper treatment of respondents
6. Financial support for treatments
7. Premium paying in years of respondents
8. Ownership of medical insurance by the respondents
9. Harassments from medical insurance company officials for submitting claims.

The results of the said factor analysis along with all the relevant tables are being presented in the following tables :

Table 21 : Correlation Matrix

		Name of Company where Mediclaim is done	Nature of Company where Mediclaim is done	Suffering of respondent from any serious disease or not	Admission of respondent in Private Hospital or Nursing Home	Proper Treatment of Respondents	Financial Support for treatment through Mediclaim	Premium Paying Years for Respondents	Ownership of Mediclaim for the respondents
Correlation	Name of Company where Mediclaim is done	1.000	.107	.385	.217	.149	.203	-.283	-.156
	Nature of Company where Mediclaim is done	.107	1.000	.088	.057	.067	.125	-.047	.140
	Suffering of respondent from any serious disease or not	.385	.088	1.000	.854	.736	.673	-.449	-.109
	Admission of respondent in Private Hospital or Nursing Home	.217	.057	.854	1.000	.737	.666	-.393	-.100
	Proper Treatment of Respondents	.149	.067	.736	.737	1.000	.824	-.320	-.159
	Financial	.203	.125	.673	.666	.824	1.000	-.306	-.252

	Support for treatment through Mediclaim								
	Premium Paying Years for Respondents	-.283	-.047	-.449	-.393	-.320	-.306	1.000	.032
	Ownership of Mediclaim for the respondents	-.156	.140	-.109	-.100	-.159	-.252	.032	1.000
	Harrasment from Medical Associatives from Submitting Claim	.180	.051	.781	.810	.642	.478	-.367	.036
Sig. (1-tailed)	Name of Company where Mediclaim is done		.146	.000	.015	.070	.021	.002	.060
	Nature of Company where Mediclaim is done	.146		.191	.285	.253	.108	.322	.082
	Suffering of respondent from any serious disease or not	.000	.191		.000	.000	.000	.000	.139
	Admission of respondent in	.015	.285	.000		.000	.000	.000	.161

	Private Hospital or Nursing Home								
	Proper Treatment of Respondents	.070	.253	.000	.000		.000	.001	.057
	Financial Support for treatment through Mediclaim	.021	.108	.000	.000	.000		.001	.006
	Premium Paying Years for Respondents	.002	.322	.000	.000	.001	.001		.377
	Ownership of Mediclaim for the respondents	.060	.082	.139	.161	.057	.006	.377	
	Harrasment from Medical Associatives from Submitting Claim	.036	.309	.000	.000	.000	.000	.000	.362

a Determinant = 4.869E-03

Table 22 : KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.816
Bartlett's Test of Sphericity	Approx. Chi-Square	506.741
	df	36
	Sig.	.000

Table 23 : Communalities

	Initial	Extraction
Number of Family Members of the respondents	1.000	.650
Caste of the respondents	1.000	.449
Ownership of Mediclaim for the respondents	1.000	.725
Name of Company where Mediclaim is done	1.000	.497
Suffering of respondent from any serious disease or not	1.000	.846
Proper Treatment of Respondents	1.000	.851
Financial Support for treatment through Mediclaim	1.000	.789
Harrasment formMedical Associatives from Submitting Claim	1.000	.702
Premium Paying Years for Respondents	1.000	.470

Extraction Method: Principal Component Analysis.

Table 24 : Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.491	38.794	38.794	3.491	38.794	38.794
2	1.396	15.508	54.303	1.396	15.508	54.303
3	1.092	12.135	66.438	1.092	12.135	66.438
4	.938	10.419	76.856			
5	.675	7.496	84.352			
6	.652	7.245	91.598			
7	.470	5.227	96.824			
8	.163	1.812	98.637			
9	.123	1.363	100.000			

Extraction Method: Principal Component Analysis.

Table 25 : Component Matrix

	Component		
	1	2	3
a. Number of Family Members of the respondents	.150	.748	.262
b. Caste of the respondents	-.191	.607	-.211
c. Ownership of Mediclaim for the respondents	-.199	-.348	.751
d. Name of Company where Mediclaim is done	.410	.529	.222
e. Suffering of respondent from any serious disease or not	.917	-1.625E-02	6.404E-02
f. Proper Treatment of Respondents	.868	-.209	-.233
g. Financial Support for treatment through Mediclaim	.822	-5.907E-02	-.332
h. Harrasment formMedical Associatives from Submitting Claim	.799	-.110	.227
i. Premium Paying Years for Respondents	-.562	-8.921E-02	-.382

Extraction Method: Principal Component Analysis.

a 3 components extracted.

And finally they were sub divided into 3 factors :

- **Factor - 1 :** Which may be termed as **Treatment related hazards and financial support.**
- **Factor - 2 :** Which relates to only Ownership of medical insurance, so it may be termed as **type of Ownership**.
- **Factor – 3 :** Only takes into account the name of the company where medical insurance is done, so it may be termed as **Company.**

So, from the factor analysis, we can conclude that harassment related factors are :

1. Treatment related hazards and financial support.
2. Type of Ownership of medical insurance policies.
3. Types of companies, i.e., public or private.

1.9. Comparative Analysis between Mediclaim Policy and CHAT Scheme

1.9.1. Decile-Wise Classification of Illness on the Basis of Total Health Expenditure

In general, insured people prefer to have health insurance cover against both catastrophic exposures and less catastrophic exposures. Therefore, apart from knowing how many illness episodes are covered by both insurance schemes, it is equally important for us to know the nature of illness episodes eligible for reimbursement in terms of treatment cost. To know whether the pattern and eligibility of reimbursement is correlated with the cost of illness/treatment, the illness episodes are classified into 10 classes. It is done with an interval of 10 per cent of the illness episodes (that is, 10 per cent of 100 = 10 in each class) in an ascending order based on the value of total health expenditure (cost of illness). Table 26 presents the distribution and mean value of health expenditure by deciles.

Table 26 : Classification of Reported Illness Episodes into Health Expenditure Deciles

Deciles	Number of Reported Illnesses	Mean Value of Health Expenditure (in INR)	Cumulative Percentage Distribution of Health Expenditure (%)
1	10	2(2)	0.02
2	10	42(16)	0.41
3	10	97(16)	0.95
4	10	165 (22)	1.61
5	9	245(28)	2.38
6	8	354(41)	3.44
7	10	527(59)	5.13
8	10	823(118)	8.00
9	10	1533(367)	14.91
10	10	6493(5945)	63.15
Total	97	1025(2650)	100.00

Source: Household survey. Figures in brackets show standard deviation from mean, Methodology used from *Sukumar Vellakkal, Mediclaim Policy and CHAT Scheme in India*. *Journal of Health Management, 14, 1 (2012): 13–26*

We can observe from Table 4.26 that 63 per cent of the health expenditure falls under the upper deciles, which means, that the total health expenditure falls more heavily on the upper deciles for all reported illness episodes.

1.9.2. Eligible Illness Episodes for Reimbursement

Based on the types of benefit packages offered by each insurance scheme, we have estimated the illness episodes that will be covered. Table 4.27 gives the total number of reported illness episodes as well as the number and proportion of illness episodes covered under various insurance schemes. Table 4.27 demonstrates that, of the total reported illness episodes, the Mediclaim policy covers only a limited number of illness episodes across various locations. On an average of all locations, Mediclaim policy covers only around eight per cent of the total reported illness episodes. In contrast to this, the CHAT scheme covers a large proportion of the reported illness episodes (on an enrage of 90 per cent) across various locations. In short, we can find that various CHAT schemes are more comprehensive than the Mediclaim policy with respect to covering a large proportion of reported illness episodes. To see whether the coverage is skewed in favour of low-cost or high-cost illness episodes or both are evenly covered under these insurance scheme, let us now examine the decile-wise distribution of illness episodes across both insurance schemes (see Table 3), keeping in mind that the Mediclaim policy covers only around eight per cent whereas the CHAT scheme covers 90 per cent of the reported illness.

Table 27 : Illness Episodes Covered by Both Insurance Schemes

		Mediclaim Policy		CHAT Scheme	
Location	**Total Number of Reported Illnesses**	Number of Illness Episodes Covered	Proportions of Eligible Illness Episodes to Total Illness Episodes	Number of Illness Episodes Covered	Proportions of Eligible Illness Episodes to Total Illness Episodes
Barasat	25	3	10%	24	97%
Birati	25	2	8%	23	94%
Shyamnagar	25	1	6%	22	93%
Naihati	25	2	7%	20	74%
All Locations (Average)	100	2	8%	23	90%

Source : Household Survey

Table 27 demonstrates that, of the total reported illness episodes, the Mediclaim policy covers only a limited number of illness episodes across various locations. On an average of all locations, Mediclaim policy covers only around eight per cent of the total reported illness episodes. In contrast to this, the CHAT scheme covers a large proportion of the reported illness episodes (on an average of 90 per cent) across various locations. In short, we can find that various CHAT schemes are more comprehensive than the Mediclaim policy with respect to covering a large proportion of reported illness episodes. To see whether the coverage is skewed in favour of low-cost or high-cost illness episodes or both are evenly covered under these insurance scheme, let us now examine the decile-wise distribution of illness episodes across both insurance schemes (see Table 3), keeping in mind that the Mediclaim policy covers only around eight per cent whereas the CHAT scheme covers 90 per cent of the reported illness.

Table 28 : Distribution of Reported Illness Episodes Eligible for Reimbursement under each Insurance Scheme (All Locations Together), Decile-Wise

		Mediclaim Policy		**CHAT Scheme**	
Location	**Total Number of Reported Illnesses**	Number of Illness Episodes Covered	Proportions of Eligible Illness Episodes to Total Illness Episodes	Number of Illness Episodes Covered	Proportions of Eligible Illness Episodes to Total Illness Episodes
Barasat	25	3	10%	24	97%
Birati	25	2	8%	23	94%
Shyamnagar	25	1	6%	22	93%
Naihati	25	2	7%	20	74%
All Locations (Average)	100	2	8%	23	90%

Source : Household Survey

It is clear that the CHAT scheme reimburses for eligible illness fairly across all the deciles. But the Mediclaim eligible illness episodes are more skewed in the upper deciles. It can be seen that though only around eight per cent of the total reported illness episodes are covered by the Mediclaim policy; out of this, a larger proportion of eligible illness episodes (41 per cent) falls in the upper health expenditure deciles. But, in the CHAT scheme, the proportion of illness episodes is fairly distributed across each health expenditure decile. In short, though the Mediclaim policy covers a few illness episodes, it covers mainly the high-

cost illness episodes. On the other hand, the various CHAT scheme cover low-cost as well as the high-cost illness episodes. In summary, we can infer that the CHAT scheme covers those illness episodes that will be having both high and low health expenditure but Mediclaim covers only those illness episodes that will be having high expenditure.

1.9.3. Reimbursement Levels

Table 4.29 presents the mean health care expenditure on eligible illness episodes under each insurance scheme as well as of all reported illness episodes.

Table 29 : Reimbursement for Both 'Eligible' and 'All' Illness Episodes from Mediclaim Policy and CHAT Scheme

		Mediclaim Policy		CHAT Scheme	
Location	Mean of Total Health Expenditure of All Illness Episodes	Proportion of Reimbursement to Total Health Expenditure for All Illness Episodes(%) (n=100)	Proportion of Reimbursement to Total Health Expenditure for All Illness Episodes(%) (n=25)	Proportion of Reimbursement to Total Health Expenditure for All Illness Episodes(%) (n=100)	Proportion of Reimbursement to Total Health Expenditure for All Illness Episodes(%) (n=25)
Barasat	181(463.6)	8(25)	82(19)	45(19)	46(17)
Birati	101(272.3)	7(24)	86(21)	44(17)	47(13)
Shyamnagar	92(166.8)	5(20)	85(20)	43(17)	46(13)
Naihati	85(228.9)	4(18)	64(34)	28(26)	38(23)
All Locations (Average)	100(265.0)	5(21)	77(28)	37(23)	44(18)

Source: Household Survey. Figures in Brackets Show Standard Deviation from Mean.

Out of the total reported illnesses in all locations, the CHAT scheme reimbursed 37 per cent of the total health expenditure whereas the Mediclaim policy reimbursed only five per cent of the total health expenditure. Since the true purpose of having health insurance coverage is its ability to reduce the out-of- pocket financial burden of those insured, the CHAT scheme is relatively more capable than the Mediclaim policy to provide financial protection during illness. However, taking into account only the eligible illness episodes for reimbursement, the CHAT scheme reimburses only 44 per cent of the total health expenditure incurred under the eligible illness episodes, even though 90 per cent of all illness episodes are 'eligible illness episodes for reimbursement' under this scheme. Though the medical policy covers only eight per cent of all illness episodes, it reimburses 77 per cent of the total health expenditure of these eligible illness episodes, which means that reimbursement rate is

higher in the Mediclaim policy than in the CHAT scheme. The obvious reason for this is that the Mediclaim policy covers illness episodes that require hospitalization rather than outpatient consultation. These episodes are more likely to be chronic illness and hence, high-cost. Let us now discuss the decile-wise reimbursement for eligible as well as for all illness episodes under both insurance schemes (see Table 4.30).

Table 30 : Decile-Wise Reimbursement for both 'Eligible' and 'All' Illness Episodes from Mediclaim Policy and CHAT Scheme

		Mediclaim Policy		CHAT Scheme	
Deciles	Mean of Total Health Expenditure of All Illness Episodes	Proportion of Reimbursement to Total Health Expenditure for All Illness Episodes(%) (n=100)	Proportion of Reimbursement to Total Health Expenditure for All Illness Episodes(%) (n=25)	Proportion of Reimbursement to Total Health Expenditure for All Illness Episodes(%) (n=100)	Proportion of Reimbursement to Total Health Expenditure for All Illness Episodes(%) (n=25)
1	2(2)	0(0)	0(0)	35(27)	50(0)
2	42(16)	0(0)	0(0)	34(22)	50(16)
3	97(16)	1(7)	100(0)	41(24)	46(20)
4	165 (22)	1(9)	61(45)	40(23)	44(20)
5	245(28)	1(9)	72(26)	42(18)	44(15)
6	354(41)	1(11)	80(28)	41(20)	42(20)
7	527(59)	3(16)	78(40)	41(18)	43(16)
8	823(118)	4(19)	75(34)	42(22)	43(21)
9	1533(367)	10(28)	82(23)	40(17)	40(17)
10	6493(5945)	32(41)	78(24)	42(17)	43(16)
Total	1025(2650)	5(21)	77(28)	37(23)	44(18)

Source: Household Survey. Figures in Brackets Show Standard Deviation from Mean.

It is obvious from Table 4.30 that the CHAT scheme reimburses fairly for the eligible as well as for all illness episodes across the deciles. The proportion of reimbursement to total health expenditure ranges from 34 per cent to 42 per cent for all illness episodes and from 40 per cent to 50 per cent for 'eligible illness episodes'. But, the Mediclaim policy reimburses only a small proportion of the total health expenditure for all illness episodes, except the 10th decile. However, the mean value of reimbursement from Mediclaim policy for eligible illnesses is skewed towards the upper deciles as compared to the CHAT Scheme. For example, the Mediclaim policy reimburses 82 per cent and 78 per cent of the total health expenditure of the eligible illnesses in the upper 9th and 10th deciles. It means that

though the Mediclaim policy covers only a few illness episodes, it provides a higher level of financial protection to the illness episodes that are covered.

1.10. Findings, Conclusion and Recommendations

(a) One of the major findings of this study is that people insured with both CHAT scheme and Mediclaim policies have to pay for health care despite paying the insurance premium, which means that neither scheme is comprehensive enough to minimize the burden of the out-of-pocket health expenditure. From an insured person's perspective, the objective of having health insurance protection is to minimize the burden of out-of-pocket health expenditure by getting complete reimbursement for each illness incident. However, such a comprehensive health insurance package can be provided only at a premium higher than is charged now and could prove beyond the reach of a large part of the Indian population.

(b) We have observed above, in both the Mediclaim policy and the CHAT scheme that the insured persons are in a situation of having to pay their health insurance premium on the one hand, and out-of-pocket spending for some part of the health care on the other.

(c) Another major question we raise in this study is, which of the two—the Mediclaim policy or the CHAT scheme—provide a higher level of effective financial protection to the insured. The overall financial protection is higher under the CHAT scheme than under the Mediclaim policy.

(d) The Mediclaim policy covers a small proportion (around eight per cent) of the total reported illness episodes while the CHAT scheme covers a large proportion (more than 90 per cent). Similarly, the Mediclaim policy reimburses only five per cent of the total health expenditure but the CHAT scheme reimburses on an average of 37 per cent of the total health expenditure.

(e) The Mediclaim policy gives the wrong impression that health insurance is the least attractive health care financing strategy. This could be one reason why the Mediclaim policy covers only a small proportion of the population even though it has been in the market since 1987.

(f) However, though the Mediclaim policy covers only a few illness episodes and thus reimburses only a meager portion of the total health care expenditure, one

argument in its favour is that it gives catastrophic protection for those covered illnesses as compared to the CHAT scheme.

(g) The Mediclaim policy still has relevance in a situation where high treatment costs of catastrophic illnesses lead to pushing people below the poverty line.

(h) The issue of the non-comprehensiveness of health insurance schemes should be viewed in a context where a large part the Indian population does not have significant experience with any kind of risk pooling forms of insurance, other than the life insurance scheme, which are mainly saving schemes (where they will get back a significant part of the premium income even if the insured events do not occur). In such a situation, a person enrolled with health insurance perhaps expects that he/she would get back a major part of the premium even if the person does not fall sick, although the person is aware of the fact from the health insurance documents that reimbursement will be given only when the insured event occurs. Issues arise when an insured person does not even get reimbursement once he/she falls sick. In this context, we can observe that **the various CHAT schemes have a significant comparative advantage over the Mediclaim policy, partly in terms of the large number of illness episodes eligible for reimbursement from CHAT scheme.**

(i) Apart from the above issues, we have found that the illness episodes, health expenditure and reimbursement levels vary considerably not only between the Mediclaim policy and the CHAT scheme but also across various locations.

(j) Therefore, it is important to consider the region-specific features, such as health care infrastructure, health problems, etc., while designing health insurance schemes.

(k) To increase the health insurance penetration in the country, health insurance packages must be comprehensive and must reflect community preferences, income levels, and location-specific health and health care conditions.

(l) Moreover, community participation in decision-making is recommended for ensuring universal access to necessary health care. As the market is not able to respond to people's preferences and is unable to provide complete financial protection during illness through health insurance, the central, state and local governments should make policy decisions to implement universal and comprehensive health insurance programmes with community participation. This can be done through initiatives such

as the National Rural Health Mission (NRHM) and National Urban Health Mission (NUHM) by making community health insurance an integral part of it.

(m) It needs to be borne in mind that the CHAT scheme is a hypothetical health insurance scheme composed by the surveyed communities. The fact that the communities chose to fashion an insurance package that was vastly dissimilar to the Mediclaim policy should be a pointer to people's preferences.

(n) From the perspective of a national health care policy, the CHAT scheme has the advantage of rationing the limited health care resources. The co-insurance of 50 per cent would work as an effective tool to control demand-induced moral hazard.

1.10.1. Recommendations and Limitations

Before concluding, let us also point out some of the limitations of this study.

(a) For effectively comparing the nominal value of money of the Mediclaim policy and the CHAT scheme, we should have the market premium of both health insurance schemes. But the CHAT scheme does not have a market premium, making the two non-comparable.

(b) Since the study is conducted in a hypothetical scenario of being insured, the data on household expenditure that we have utilized do not necessarily reflect that of people who have comprehensive health insurance coverage. The fact is that once comprehensive health insurance programmes are put in place, it may lead to major market failure such as 'adverse selection' (propensity of the high risk/unhealthy to join the scheme than the low risk/healthy people) and 'moral hazard' (change in the behaviour of the insured in the form of over-utilization of health care goods and also of taking less preventive care due to insurance coverage).

(c) Moreover, in a low-income country like India, utilization of health care facilities is poor because of financial constraints; once comprehensive insurance that will remove, or at least reduce this constraint, is introduced, it can be expected that utilization will drastically increase. This will imply much higher health expenditure than revealed in the data. The present article has not looked into these issues. These could offer scope for future research.

1.11. Limitations of the Study

Further, the following limitations were faced during the study :

1. The sample size was very small, which acted as the hindrance in arriving at the conclusions.
2. Furthermore, proper time was not there to reconstruct the questionnaire after the pilot study, due to the time constraint for submission of the project.
3. Lastly, but not the least, the statistical tests which are applied for the study, are mostly suited for normal distribution which could be obtained as a result of random sampling, but here, due to time constraint, convenience sampling was used for the study.

BIBLIOGRAPHY & REFERENCES

Books & Journals

1. Ahuja, R. & J. Jutting (2004). Are the poor too poor to demand health insurance? New Delhi: Indian Council for Research on International Economic Relations.
2. Arrow KJ. Uncertainty and the Welfare Economics of
3. Aristotle. Nicomachean Ethics.
4. Bennett S, Creese A, Monasch R. Health Insurance Schemes for People Outside Formal Sector Employment.
5. Cutler DM, Zeckhauser RJ. The Anatomy of Health Insurance. In: Culyer AJ, Newhouse JP, Handbook of Health Economics. Elsevier, Amsterdam, 2000:563 643.
6. Cutler DM, Zeckhauser R. Extending the Theory to Meet the Practice of Insurance. Brookings-Wharton Papers on Financial Services, 2004.
7. Cutler DM, Reber SJ. Paying for Health Insurance : The Trade-off Between Competition and Adverse Selection. Q J Health Econ 1998; 113:433–66.
8. Culyer AJ, Newhouse JP. Handbook of Health Economics.
9. Danis, M., A.K. Biddle & S.D. Goold (2002). Insurance benefit preferences of the low-income uninsured. Journal of General Internal Medicine, 17(2), 125–33.
10. Danis, M., E. Binnendijk, S. Vellakkal, A. Ost, R. Koren, & D. Dror (2007). Eliciting health insurance benefit choices of low income groups. Economic and Political Weekly, 62 (32), 3331–3339.
11. Danis, M., M. Ginsburg & S.D. Goold (2006). The coverage priorities of disabled adult medical beneficiaries.

12. De Allegri, M., M. Sanon, J. Bridges et al. (2006). Understanding consumers preferences and decision to enrol in community-based health insurance in rural west Africa. Health Policy, 76(1), 58–71.
13. Dror, D., R. Koren, A. Ost, S. Vellakkal, & M. Danis (2007a). Health insurance benefit packages prioritised by lowincome clients in India: Three criteria to estimate effectiveness of choice. Social Science and Medicines, 64(4), 884–96.
14. Dror, D., R. Radermacher & R. Koren (2007b). Willingness to pay for health insurance among rural and poor persons: Field evidence from seven micro health insurance units in India. Health Policy, 82(1), 12–27, Elsevier, Amsterdam, 2000.
15. Gilbert DT, Pinel ED, Wilson TD, Blumber SJ, Wheatley TP. Durability Bias in Affective Forecasting. In: Gilovich T
16. Gumber, A. & V. Kulkarni (2000). Health insurance for informal sector-case study of Gujarat, Economic and Political Weekly, 35(40), 3607–3613 .
17. Goold, S., D., A.K. Biddle, G. Klipp et al. (2005). Choosing health plans all together: A deliberative exercise for allocating limited healthcare resources. Journal of Health Policy and Law, 30(4), 563–601.
18. GoI. (2005a). Morbidity, healthcare and the condition of the aged, NSSO 60th round, report No 507, National Sample Survey Organization. New Delhi: Ministry of Statistics and Programme Implementation.
19. Griffin D, Kahneman D, eds. Heuristics and Biases: The Psychology of Intuitive Judgment. Cambridge University Press, Cambridge, 2002:292–312.
20. Hadley J, Steinberg EP, Feder J. Comparison of uninsured and privately insured hospital patients: condition on admission, resource use, and outcome. JAMA 1991; 265:374–9.
21. Kaiser Family Foundation. National Survey on Americans as Health Care Consumers: An Updated on the Role of Quality Information. Menlo Park CA, Kaiser Family Foundation, 2000.
22. Kahneman D, Tversky A. Prospect Theory: An Analysis of Decision under Risk. Econimetrica 1979; 47:263–91.
23. Keefe, C.W. & S.D. Goold (2004). Designing health plan benefits: A simulation exercise. Medical Education, 38(11), 1196.

24. Leftley, R. (2005). Technical assistance for the promotion of micro insurance—The experience of opportunity international. Good and bad practices in micro insurance. CGAP Working Group on Micro insurance. Good and Bad Practices Case Study No. 11 (Report), International Labour Organisation, Geneva. Retrieved from http://www.ilo.org/employment/Whatwedo/Publications (accessed on 12th January 2012)
25. Mathiyashagan, K. (1998). Willingness to pay for rural health insurance through community participation in India. International Journal of Health Planning and Management, 13(1), 47–67.
26. Medical Care. Am Econom Rev 1963; 53:961.
27. Newhouse JP. Creme skimming asymmetric information, and a competitive insurance market. J Health Econ 1984; 3: 97–100.
28. Pauly MV, Zweifel P, Scheffler RM, Preker AS, Bassett M. Private Health Insurance in Developing Countries. Health Affairs 2006; 25:369–79.
29. Peters, D.H., A.S. Yasbeck, R.P. Sharma et al. (2002). Better health systems for India's poor: Findings, analysis and scheme. Washington, DC: World Bank.
30. Radwan, I. (2005). India: Private health services for the poor, a policy note. Washington, DC: World Bank.
31. Ruger JP. Aristotelian Justice and Health Policy: Capability and Incompletely Theorized Agreements [Ph.D. Dissertation]. Cambridge, MA, Harvard University, 1998.
32. Ruger JP. Toward a Theory of a Right to Health: Capability and Incompletely Theorized Agreements. Yale J Law Humanities 2006; 18:273–326.
33. Ruger JP. Health, Capability, and Justice: Toward a New Paradigm of Health Ethics, Policy and Law. Cornell Journal of Law and Public Policy 2006; 15:102–82.
34. Ruger JP. Rethinking Equal Access: Agency, Quality and Norms,. Global Public Health 2007; 2:78–96.
35. Ruger JP. Health and Social Justice. Lancet 2004; 364: 1075–80.
36. Ruger JP. Ethics of social determinants of health. Lancet 2004; 364:1092–7.
37. Schone, B.S. & P.F. Cooper (2001). Assessing the impact of health plan choice. Health Affairs (Millwood), 20(1), 267–75.

38. Sen AK. Inequality Reexamined. Oxford, Oxford University Press, 1992.
39. Sen AK. Development as Freedom. New York, Knopf, 1999:45.
40. Sen AK. Development as Freedom. New York, Knopf, 1999:52–3.
41. Sen AK. Development as Freedom. New York, Knopf, 1999:186.
42. Swartz K. The Medically Uninsured; Special Focus on Workers. National Health Policy Forum, 1998.
43. Sen AK. Development as Freedom. New York, Knopf, 1999:119.
44. Sen AK. Development as Freedom. New York, Knopf, 1999:88.
45. Sen AK. Development as Freedom. New York, Knopf, 1999:10.
46. Thaler R. Toward a Positive Theory of Consumer Choice. J Econ Behav Org 1980; 1:39–60.
47. WHO Division of Analysis, Research and Assessment Paper No. 16, 1998.
48. World Health Organisation (2010). World health statistics 2010. Geneva, Switzerland: WHO.

Websites

1. "Arogya Raksha Yojana." Arogya Raksha Yojana. Web. 30 Apr. 2012. <http://www.arogyarakshayojana.org/>.
2. "Census of India - India at a Glance : Rural Urban Distribution." Web. 02 May 2012. <http://www.censusindia.gov.in/Census_Data_2001/India_at_glance/rural.aspx>
3. "History of Insurance in India." 12 July 2007. Web. 30 Apr. 2012.
4. Http://www.who.int/gho/countries/ind.pdf. World Health Organization, 2009. Web. 2012.
5. India Early Childhood. Unicef. Web. 30 Apr. 2012.
6. "India." WHO. Web. 30 Apr. 2012. <http://www.who.int/countries/ind/en/>.
7. "Insitute of Actuaries of India." Welcome to the Institute of Actuaries India. Web. 30 Apr. 2012. <http://www.actuariesindia.org/>.
8. "Integrated Child Development Services." Ministry of Women and Child Development. Web. 30 Apr. 2012. <http://wcd.nic.in/icds.htm>.
9. "MAJOR DISEASES IN INDIA." India Health Progress. Web. 30 Apr. 2012. <http://www.indiahealthprogress.in/major-diseases-india-0>.

10. Ministry of Health and Family Welfare Government of India. "Financing and Delivery of Health Care Services in India." 2005. Web. 30 Apr. 2012.
11. "National Insurance Company Ltd." Web. 30 Apr. 2012. <http://www.nationalinsuranceindia.com/nicWeb/nic/PolicyServlet?id=9999>.
12. "Rashtriya Swasthya Bima Yojana." Rashtriya Swasthya Bima Yojana. Web. 30 Apr. 2012. <http://www.rsby.gov.in/>.
13. World Health Organization. "National Health Accounts in India." 2005. Web. 30 Apr. 2012.