



State-wise self reported enrolment in any health insurance schemes in India: A NSSO, 2014-15

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ABSTRACT

The National Health Insurance Scheme aims to improve poor people's access to quality and reduce out-of-pocket expenditure on health care in India. Poverty and ill health are close related to each other. The poor are often unable to availed the smooth consumption across periods of ill health and also excess of incurred expenditure on health are a major concerned of individuals to push into poverty as seen across the world. The objective is based on to excess to show the state-wise coverage of self reported enrolment in any health insurance schemes by age, gender, area, Socio-economic status, education, Religion, social group and Marital status of the individuals. A stratified two-stage sampling design was adopted during the study. The study is extracted from national survey, NSSO, conducted January-June 2014 in every states of India. First stage sampling, the selection of census village in the rural areas and urban frame survey block in the urban sector. In second stage, household was selected by using random sampling. Survey covered 65,932 households and 333,104 persons were interviewed all over 36 states of India. All state showed average monthly expenditure Rs.8665 and monthly per capita expenditure Rs.1913. All over states showed 15.1% self reported enrolment in any health insurance. Maximum self reported insurance were found for Mizoram (77.5%), Telengana (59.6%), Andhra Pradesh (58.2%), Chhattisgarh (40.8%), Kerala (37.7%), Nagaland (29.8%) whereas minimum enrolment were obtained for Madhya Pradesh (3.3%), Uttaranchal (2.2%), A & N Island (1.3%), Manipur (1.0%) and Lakshadweep (0.1%) respectively and reaming states showed enrolment between 2.4% and 4.4%. Since study covered only 15.1% individuals all over India. In order to bring significant increase in enrolment, government need to frame their policy, need to start awareness programme at ground levels. Government need to maximise their infrastructure and funds. As mostly policy in India (Private and public) is based on inpatient care only. So, government need to frame policies of out-patients care too and need to universalize in all states of India. States and centres maximum insurance policy are applicable only for poor populations, need to involves the other population in order to maximise the coverage of any health insurance schemes

Key Words: Average Household size, Health Insurance scheme, MPCE expenditure, Socio economic status.



INTRODUCTION

The basis of Universal health coverage (UHC) [1] as 'ensuring that all people can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship', is a goal of national healthcare systems globally[2]. India's Twelfth Five-Year plan has proposed the strategy and first steps towards roll-out of UHC [3]. Several developing countries [4-5] along with India have introduced tax-financed health insurance schemes to coverage to their poor population. About 3.5% of the population fall the below the poverty line and 5% households suffer catastrophic health expenditure due to unaffordable health cost [6]. Social health insurance scheme in India covered expenses of hospital, so schemes failed to protect poor households from increasing out-of-pocket expenditure[6]. Medicine cost is main share of the health care spending the people. Health insurance is only one measure of social security of the community which provide assured benefit of health and medical care during the time of illness [7]. Private health insurance companies will have impact on the cost of health care equity in the financing of care, quality and cost-effectiveness [8]. According to 60th NSSO on morbidity and health care, 79% of the 11,8 million households pushed into poverty due to small frequent expenditure on outpatients care [9]. Various study revealed that the drugs shared the 49% -77% of all health care expenditure in India [10]. The main objective of health insurances is to reduce households' direct health expenditures by providing them with adequate financial protection when seeking health care. According to recent review on health insurance program in low and middle-income countries for informal population revealed that population often do not meet their financial protection [11]. On other hand many studied revealed that household met their financial protection in Senegal, Vietnam and Georgia [12-14]. Private health care provider accounting for 82% of outpatient visits and 65% for inpatient visits in [15], where as public health facility accounted for 26,5% of total health expenditures, while private expenditure represented 73,5% in 2007 [16]. 90% of these private expenditures produced high inequality due to household out-of-pocket (OOP) expenditures. Health insurance offers inconclusive evidence of effective financial protection of insured poor [17]. It is commercial or social health insurance schemes are rare in rural India [18], it is necessary to explore the impact of health insurance on insured households (HHs) covered by mutual aid insurance, or community based health insurance (CBHI) operated among communities in India. Outpatient care represents the lion's share of health-care spending among resource-poor rural persons in India [19], and most of that cost is borne by health-care seekers out-of-pocket (OOP) [20-22].

Objective:

To access the coverage of health insurance schemes by age, gender, area, wealth quintiles, education, Religion, social group and Marital status of the individuals.

Study design

The present study based on secondary source analysis collected by the National Sample Survey Organisation (NSSO), India.



Data source

The data used in this study were extracted from the 25th schedule of the 71st round of the cross-sectional collected by the National Sample Survey Organization (NSSO) in its 71st round (2014) on 'Health' and 'Education'. NSSO is a national organisation under the Ministry of Statistics In India. The data was collected in all states of India from January 2014 to June 2014.

Methodology

A stratified two-stage sampling design was adopted for the present study. First stage sampling, the selection of census village in the rural areas and urban frame survey block in the urban sector. In second stage, household was selected by using random sampling. Survey covered total of 4577 villages and 3720 urban blocks were surveyed from which 36,480 and 29,452 households were sampled in rural and urban areas respectively. Survey covered 65,932 households and 333,104 persons were interviewed all over 36 states of India. The survey collected data in face-to-face interviews, using an interview schedule, on morbidity (self-reported), utilization of health care services (including types), and household expenditure on health care. Information was collected on every event of hospitalization of a household member, whether living or deceased at the time of survey, during the 365 days preceding the date of enquiry.

Data analysis

Data was analysed using SPSS version 21.0 for analysis (SPSS Inc. SPSS Statistics for Windows, Version 21.0. Chicago). Wealth quintiles are calculated for all households using monthly per capita consumption expenditures. The usual monthly per capita consumer expenditure (UMPCE) was calculated as the household's usual consumption expenditure in a month divided by the size of the household and then divided into five economic quintiles, from Q1 (poorest) to Q5 (richest).

Result:

Table1: Number of households covered, No. of Individuals screened, Average Household consumer expenditure (Rs.), Monthly per capita expenditure (MPCE) and average household size

	No. of Households covered	No. of Individuals screened	Average Household consumer expenditure (Rs.)	Monthly per capita expenditure (MPCE)	Average Household size
Jammu and Kashmir	1279	6788	8672	1711	5
Himachal Pradesh	896	4392	8628	1972	5
Punjab	1529	7797	12228	2642	5
Chandigarh	184	874	16102	3903	5
Uttaranchal	672	3177	7911	1855	5



Haryana	1424	8040	12219	2379	6
Delhi	1158	5424	17538	4207	5
Rajasthan	2912	16655	9603	1822	6
Uttar Pradesh	7921	47083	8143	1533	6
Bihar	3167	17596	6647	1290	6
Sikkim	512	2100	7478	1997	4
Arunachal Pradesh	626	2994	6319	1512	5
Nagaland	576	2651	8833	1992	5
Manipur	1408	7187	7397	1462	5
Mizoram	768	3864	11620	2403	5
Tripura	1408	5977	7884	1961	4
Meghalaya	832	4380	8360	1682	5
Assam	2255	11411	6942	1479	5
West Bengal	5019	22783	7806	1901	5
Jharkhand	1453	8318	7440	1440	6
Odisha	2442	11576	5631	1307	5
Chhattisgarh	1205	6026	6488	1415	5
Madhya Pradesh	3613	19131	7487	1533	5
Gujarat	2888	15211	9941	2102	5
Daman and Diu	128	537	8684	2215	4
Dadar and Nagar Haveli	128	641	8568	2025	5
Maharashtra	5403	27124	9846	2212	5
Andhra Pradesh	2448	10636	8635	2220	4
Karnataka	2959	14727	8088	1850	5
Goa	192	916	10995	2578	5
Lakshadweep	128	836	9011	1672	7
Kerala	2478	11229	11380	2798	5
Tamil Naidu	3917	16090	8031	2124	4
Puducherry	256	1117	10199	2579	4
A & N Island	254	1234	10380	2509	5
Telengana	1494	6582	8347	2058	4
India	65932	333104	8665	1913	5

Average Household consumer expenditure (Rs.)



Average Rs.8665 was found for overall states, where as majority of northern states showed more average consumption expenditure Delhi (Rs. 17538), Chandigarh (Rs.16102), Punjab (Rs.12228), Haryana (Rs.12219) and minimum average monthly consumption expenditure found for Bihar (Rs.6647), Assam (Rs.6942), Manipur (Rs.7397) and Jharkhand (Rs.7440) respectively, rest of states showed average monthly expenditure between Rs.11620 and Rs.6488.

Monthly per capita expenditure (MPCE)

Average Rs.1913 was found for overall states, where as more monthly per capita expenditure were Delhi (Rs.4207), Chandigarh (Rs.3903), Kerala (Rs.2798), Punjab (Rs.2642), Puducherry (Rs.2579) and minimum monthly per capita consumption expenditure found for Manipur (Rs.1462), Jharkhand (Rs.1440), Chhattisgarh (Rs.1415), Odisha (Rs.1307), and Bihar (Rs.1290) respectively.

Average Household size

Average family size for all states was 5, whereas family size varies between 5 and 7 members in states. Maximum family size was 7 and minimum size was 4. Majority of states showed average family size equal to 5.

Self reported enrolment in any health insurance scheme

All over states showed 15.1% self reported enrolment in any health insurance. Maximum self reported insurance were found for Mizoram (77.5%), Telengana (59.6%), Andhra Pradesh (58.2%), Chhattisgarh (40.8%), Kerala (37.7%), Nagaland (29.8%) whereas minimum enrolment were obtained for Madhya Pradesh (3.3%), Uttaranchal (2.2%), A & N Island (1.3%), Manipur (1.0%) and Lakshadweep (0.1%) respectively and remaining states showed enrolment between 2.4% and 4.4% (Table 2)

Areawise enrolment

All states showed 13.4% enrolment in rural and 17.3% enrolment in urban areas. In rural areas, Mizoram (76.1%), Telengana (70.3%), Andhra Pradesh (66.3%), Chhattisgarh (45%) and Kerala (40.9 %), showed more enrolment where Haryana (1.9%), Madhya Pradesh (1.1%), Manipur (1%), Sikkim (0.8%) and A & N Island (0.7%) respectively. In urban areas, Mizoram (78.9%), Andhra Pradesh (49.5%), Telengana (48.6%), Nagaland (38.8%), Chhattisgarh (34.9%) and Kerala (34.6%) and minimum enrolment were found for states Puducherry (4.3%), Daman and Diu (2.8%), A & N Island (2.5%), Manipur (1%) respectively (Table 2).

Enrolment among Age

All states showed self reported enrolment as (14.6%) age 15-30 years, (17.1%) in 30-45year and 18.9% in more than 45years individuals. In age 15-30years; maximum enrolment were found for Mizoram (78%), Andhra Pradesh (60.4%), Telengana (59.8%), Chhattisgarh (40.5%) and Kerala (38.3%) and minimum enrolment were found for Uttaranchal (1.1%), A & N Island (0.8%), Manipur (0.7%) and Lakshadweep (0.4%) respectively. In age 30-45years; maximum enrolment were found for Mizoram (78.9%), Telengana (66.2%), Andhra Pradesh (64.6%), Chhattisgarh (44.3%) and Kerala (40.2%) and minimum enrolment were found for Assam (3.1%), Uttaranchal (2.9%), A & N Island (2.0%), Manipur (1.1%) respectively. In 30-45years; maximum enrolment were found for Mizoram (78.7%), Telengana (69.5%), Andhra Pradesh (63.9%), Kerala (45.9%) and



Chhattisgarh (43.3%) and minimum enrolment were found for Puducherry (4.3%), Uttaranchal (3.7%), Manipur (1.4%) and A & N Island (1.1%), respectively (Table 2).

Enrolment in education

All states showed self enrolment in health insurance as illiterate (12.6%), upto higher secondary and diploma (15.8%) and upto Postgraduate and above (23.6%). In illiterate level; maximum enrolment were found for Mizoram (74.1), Telengana (58.8%), Andhra Pradesh (55.3%), Chhattisgarh (39.8%) and Kerala (24.5%) and minimum enrolment were found for Puducherry (1.6%), Madhya Pradesh (1.5%), Manipur (0.8%), Uttaranchal (0.7%), and A & N Island (0.6%) respectively. In upto higher secondary and diploma level; maximum enrolment were found for Mizoram (78%), Telengana (60.9%), Andhra Pradesh (60.1%), Chhattisgarh (39.8%) and Kerala (24.5%) and minimum enrolment were found for Daman and Diu (3.7%), Uttaranchal (1.7%), A & N Island (1.5%), Manipur (1.0%) respectively. In upto Postgraduate and above level; maximum enrolment were found for Mizoram (82.4%), Telengana (52.1%), Nagaland (48.2%), Andhra Pradesh (47.2%) and delhi (45.4%) and minimum enrolment were found for Tripura (5.5%), Bihar (5.4%), Lakshdeep (2.8%), A & N Island (1.9%), Manipur (1.8%) respectively (Table 2).

Table 2: State-wise enrolment in any health insurance schemes based on urban/rural and education level of individuals in India

	Area		Age(Yrs)				Education			Total
	Rural	Urban	0-15 yrs	15-30 yrs	30-45 yrs	>45 yrs	illiterate	upto higher secondary and diploma	upto Postgraduate and above	
Jammu and Kashmir	5.2	8.8	5.6	6.0	8.8	7.2	3.8	7.5	24.1	6.7
Himachal Pradesh	8.0	16.4	6.5	10.1	8.3	13.4	6.7	10.0	17.1	9.6
Punjab	3.6	8.2	4.9	5.0	6.6	7.2	3.5	6.0	14.4	5.8
Chandigarh	6.8	14.2	9.7	7.7	11.0	24.8	9.2	10.4	22.1	11.6
Uttaranchal	0.0	4.9	1.8	1.1	2.9	3.7	0.7	1.7	9.0	2.2
Haryana	1.9	13.3	5.8	7.1	7.7	10.1	4.2	6.9	23.3	7.4
Delhi	17.5	23.4	17.1	19.7	24.4	35.6	12.7	19.8	45.4	23.0
Rajasthan	22.6	26.5	23.8	23.1	24.2	26.8	24.2	23.6	29.9	24.2
Uttar Pradesh	3.4	6.2	3.2	4.2	5.6	6.2	3.3	4.8	10.5	4.4
Bihar	6.6	5.2	5.7	5.5	5.9	8.8	7.2	4.9	5.4	6.1
Sikkim	0.8	18.8	6.2	7.8	6.3	9.0	4.9	8.2	15.5	7.3
Arunachal Pradesh	4.8	12.8	6.4	9.4	8.3	6.2	3.0	9.8	25.1	7.6
Nagaland	24.4	38.8	31.1	27.9	32.7	26.8	21.9	31.2	48.2	29.8
Manipur	1.0	1.0	0.9	0.7	1.1	1.4	0.8	1.0	1.8	1.0



Mizoram	76.1	78.9	75.4	78.0	78.9	78.7	74.1	78.0	82.4	77.5
Tripura	15.6	8.4	9.1	15.0	13.3	14.2	11.7	12.4	5.5	12.7
Meghalaya	19.3	28.1	22.6	20.5	22.3	24.7	23.1	21.7	23.4	22.2
Assam	2.6	5.4	2.5	3.5	3.1	4.6	2.2	3.8	9.6	3.3
West Bengal	13.8	19.3	13.7	14.9	19.0	19.4	14.0	16.5	33.5	16.4
Jharkhand	4.6	5.7	4.1	5.3	5.1	6.9	4.0	5.5	8.7	5.1
Odisha	22.4	15.7	18.0	21.0	21.2	22.0	19.9	20.3	17.5	20.4
Chhattisgarh	45.0	34.9	37.8	40.5	44.3	43.3	39.8	40.6	29.9	40.8
Madhya Pradesh	1.1	5.9	2.3	2.9	3.7	4.9	1.5	4.2	10.2	3.3
Gujarat	11.5	13.9	10.7	11.8	15.7	13.7	10.1	13.5	30.3	12.6
Daman and Diu	6.6	2.8	4.7	3.8	7.9	4.5	5.4	3.7	26.1	4.8
Dadar and Nagar Haveli	23.5	16.3	19.5	11.8	32.8	22.5	20.2	18.7	42.1	20.4
Maharashtra	1.9	13.8	5.7	6.3	10.0	9.8	3.8	7.8	26.9	7.6
Andhra Pradesh	66.3	49.5	46.0	60.4	64.6	63.9	55.3	60.1	47.2	58.2
Karnataka	7.3	14.5	7.8	10.1	12.8	13.2	6.3	12.3	27.1	10.7
Goa	24.0	18.4	15.7	16.9	22.9	29.2	20.7	21.4	17.2	21.3
Lakshadweep	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.0	2.8	0.1
Kerala	40.9	34.6	25.6	38.3	40.2	45.9	24.5	41.2	30.8	37.7
Tamil Naidu	19.9	22.7	17.1	20.7	23.3	24.5	17.9	22.8	30.0	21.3
Puducherry	6.0	4.3	3.7	4.7	6.5	4.3	1.6	5.9	6.2	4.7
A & N Island	0.7	2.5	1.5	0.8	2.0	1.1	0.6	1.5	1.9	1.3
Telangana	70.3	48.6	47.0	59.8	66.2	69.5	58.8	60.9	52.1	59.6
India	13.4	17.3	11.9	14.6	17.1	18.9	12.6	15.8	23.6	15.1

Table 2: State-wise enrolment in any health insurance schemes base on religion, socio- economic status, gender, Social group, marital status among individuals in India.

Religion wise enrolment

All states reported self enrolment in any health insurance as Hindu (15.2%) and Non Hindu (15.4%). In case of Hindu: Majorities of states who showed more enrolment were Mizoram (1.8%), Telengana (60.4%), Andhra Pradesh (59.6%), Kerala (43.1%), Chhattisgarh (41.8%), whereas minimum enrolment were seen in Uttaranchal (2.7%), A & N Island (1.6%), Nagaland (1.2%) and Manipur (0.9%). In case of Non Hindu: Majorities of states who showed more enrolment were Andhra Pradesh (59%), Mizoram (37.1%), Rajasthan (35.7%), Chhattisgarh (30.6%), whereas minimum enrolment were seen in Punjab (2.7%), Puducherry (0.9%), Manipur (0.4%) and A & N Island (0.4%) respectively (Table 3).



Enrolment in Socio-Economic status

All states reported self enrolment in any schemes as Poorest (13.2%), Poor (13%) and Non Poor (17.3%) among individuals. In Poorest level; Majorities of states who showed more enrolment were Mizoram (88.2%), Telengana (66.1%), Andhra Pradesh (57.6%), Kerala (50%) and Chhattisgarh (44.9%) where as minimum enrolment reported for Punjab (1.9%), Maharashtra (1.4%), Madhya Pradesh (1.3%), Lakshadweep (1.0%), and Manipur (0.4%) respectively. In Poor level; Majorities of states who showed more enrolment were Mizoram (69%), Telengana (64.1%), Andhra Pradesh (61%), Kerala (46.3%) and Chhattisgarh (43%) where as minimum enrolment reported for Madhya Pradesh (2.1%), Manipur (1.0%), Puducherry (0.7%) and Uttaranchal (0.5%) respectively. In Non poor level: Majorities of states who showed more enrolment were Mizoram (80.2%), Telengana (54.6%), Andhra Pradesh (56.1%), Nagaland (42.9%), and Kerala (34.8%) where as minimum enrolment reported for Madhya Pradesh (5.1%), Assam (4.5%), A & N Island (1.9%) and Manipur (1.4%) respectively (Table 3).

Enrolment in Gender

All states reported self enrolment in any insurance scheme as Male (15%) and Female (15.2%). In case of male, majorities of states showed enrolment as Mizoram (76.8%), Telengana (60.4%), Andhra Pradesh (59.6%), Chhattisgarh (41.7%) and Kerala (37.9%) where as minimum enrolment reported for Assam (3.2%), Uttaranchal (2.5%), A & N Island (1.1%), Manipur (0.9%) and Lakshadweep (0.2%) respectively. Where in female, majorities of states showed enrolment as Mizoram (78.1%), Telengana (58.7%), Andhra Pradesh (56.8%), Chhattisgarh (40%) and Kerala (37.4%) where as minimum enrolment reported for Assam (3.4%), Uttaranchal (1.9%), A & N Island (1.5%), Manipur (1.1%) respectively (Table 3).

Enrolment in Social group

All states reported self enrolment in any insurance scheme as SC (13.6%) and Non SC (16.7%). In case of SC, majorities of states showed enrolment as Mizoram (76.8%), Andhra Pradesh (51.6%), Telengana (50.5%), Kerala (34.5%) and Delhi (27.7%) where as minimum enrolment reported for Assam (2.5%), A & N Island (2.1%), Manipur (0.6%) respectively. Where in Non SC, majorities of states showed enrolment as Mizoram (80.3%), Andhra Pradesh (62.7%), Telengana (62.5%), Chhattisgarh (38.2%) and Kerala (35.5%) where as minimum enrolment reported for Madhya Pradesh (3.4%), Uttaranchal (1.2%), Manipur (1.0%) and A & N Island (0.7%) respectively (Table 3).

Enrolment in Marital status

All states reported self enrolment in any insurance scheme as Married (16.7%) and Non Married (15.1%). In case of married individuals, majorities of states showed enrolment as Mizoram (78%), Telengana (64.2%), Andhra Pradesh (62.1 %), Chhattisgarh (42.9%) Kerala (41.8%) and Delhi (26.4%) where as minimum



enrolment reported for Assam (3.7%), Madhya Pradesh (3.6%), Uttarakhand (2.6%), A & N Island (1.1%), Manipur (1.0%) and Lakshadweep (0.3%) respectively. Where in Non Non married individuals, majorities of states showed enrolment as Mizoram (77%), Andhra Pradesh (56.7%), Telangana (59%), Chhattisgarh (37.8%) and Kerala (37.8%) where as minimum enrolment reported for Madhya Pradesh (2.7%), Uttarakhand (1.8%), Manipur (1.5%) and A & N Island (1.4%) and Daman and Diu (1.3%) respectively (Table 3).

Table 3: State-wise enrolment in any health insurance schemes based on Religion, socio-Economics status, Gender, Social Group and Marital status of individuals in India

	Religion		Socio-Economic status			Gender		Social Group		Marital Status	
	Hindu	Non Hindu	Poorest	Poor	Non Poor	Male	Female	SC	Non SC	Married	Non Married
Jammu and Kashmir	7.4	7.6	5.2	5.8	8.0	7.1	6.3	7.7	5.3	8.1	4.7
Himachal Pradesh	9.9	5.5	6.9	7.7	11.8	9.8	9.4	11.4	7.2	10.5	7.6
Punjab	7.0	1.3	1.9	3.9	6.9	5.9	5.6	7.3	4.5	6.5	4.6
Chandigarh	10.4	4.2	16.7	11.3	11.5	10.8	12.4	15.6	8.7	11.8	17.1
Uttarakhand	2.7	14.0	0.0	0.5	5.2	2.5	1.9	3.0	1.2	2.6	1.8
Haryana	7.9	8.9	2.8	3.4	9.7	7.4	7.4	11.7	7.6	8.5	6.4
Delhi	24.5	22.0	2.7	5.6	25.9	23.2	22.7	27.7	23.1	26.4	18.8
Rajasthan	23.2	35.7	35.3	25.4	21.6	23.7	24.7	24.3	28.4	25.0	24.9
Uttar Pradesh	5.1	5.3	5.0	3.4	5.3	4.5	4.4	5.6	5.2	5.1	4.8
Bihar	6.1	1.7	5.8	6.4	6.0	6.1	6.2	2.7	3.7	6.6	5.7
Sikkim	7.0	4.7	3.1	5.2	11.1	7.5	7.1	13.8	8.6	7.6	7.3
Arunachal Pradesh	5.6	3.9	4.9	5.6	14.6	7.9	7.4	4.8	13.7	9.6	5.8
Nagaland	1.2	7.8	12.4	19.6	42.9	29.3	30.4	0.0	10.4	30.1	28.9
Manipur	0.9	0.4	0.4	1.0	1.4	0.9	1.1	0.6	1.0	1.0	1.5
Mizoram	71.8	37.1	88.2	69.0	80.2	76.8	78.1	78.6	80.3	78.0	77.0
Tripura	12.5	9.7	17.5	14.7	8.1	12.7	12.7	10.7	11.7	13.6	13.7
Meghalaya	24.2	18.4	30.2	20.6	22.3	20.8	23.6	17.3	18.4	22.2	23.8
Assam	4.3	13.0	2.1	3.0	4.5	3.2	3.4	2.5	3.6	3.7	2.7
West Bengal	18.2	15.1	14.2	14.4	20.3	16.5	16.3	15.6	17.6	17.9	15.6
Jharkhand	5.0	3.2	2.2	4.3	7.4	5.3	4.9	5.2	5.3	5.3	5.5
Odisha	20.5	10.1	26.8	15.4	16.7	20.6	20.2	15.1	20.6	21.5	19.9
Chhattisgarh	41.8	30.6	44.9	43.0	32.8	41.7	40.0	25.8	38.2	42.9	37.8
Madhya Pradesh	3.4	7.4	1.3	2.3	5.1	3.3	3.2	5.2	3.4	3.6	2.7



Gujarat	13.3	11.1	13.4	10.4	13.4	12.9	12.3	15.2	14.7	14.3	10.5
Daman and Diu	5.3	9.7	0.0	0.0	7.4	5.0	4.7	7.4	3.5	7.9	1.3
Dadar and Nagar Haveli	20.4	8.8	9.8	17.0	26.1	20.8	20.1	20.7	18.1	23.5	17.6
Maharashtra	8.0	14.6	1.4	2.1	11.4	7.9	7.3	11.7	6.4	8.7	6.3
Andhra Pradesh	59.6	59.0	57.6	61.0	56.1	59.6	56.8	51.6	62.7	62.1	56.7
Karnataka	11.8	11.8	5.8	6.4	15.3	10.8	10.6	11.9	9.0	12.2	9.4
Goa	21.6	8.7	32.0	31.6	19.1	23.5	19.2	15.1	24.7	24.2	22.3
Lakshadweep	16.7	0.0	1.0	0.0	0.0	0.2	0.0	0.0	5.6	0.3	0.0
Kerala	43.1	21.9	50.0	46.3	34.8	37.9	37.4	34.5	35.5	41.8	37.8
Tamil Nadu	20.4	17.0	16.1	18.4	24.9	21.6	21.0	24.9	22.9	22.6	20.4
Puducherry	5.0	0.9	3.1	0.7	6.5	5.2	4.3	4.9	3.4	5.5	4.2
A & N Island	1.6	0.3	0.0	0.0	1.9	1.1	1.5	2.1	0.7	1.1	1.4
Telangana	60.4	28.4	66.1	64.1	54.6	60.4	58.7	50.5	62.5	64.2	59.0
Total	15.2	15.4	13.2	13.0	17.3	15.0	15.2	13.6	16.7	16.7	15.1

Urban 17.3% showed more enrolment than rural (13.4%). More than 45 years old (18.9%) individuals showed enrolment that 0-15years (11.9%), 15-30years (14.6%) and 30-45years (17.1%), Among education levels, Upto Postgraduate and above (23.6%) showed more enrolment as compared to Upto higher secondary and diploma (15.8%). In case of religion, both Hindu (15.2%) and Non Hindu (15.4%) showed enrolment closed to each other, where in case of socio- economics status, Non poor (17.3%) showed more enrolment than poorest (15.3%) and Poor (13%). Both male (15%) and female (15.2%) closed to each enrolment. In social group, Non SC (16.7%) showed more enrolment than SC (13.6%), where married (16.7%) showed more enrolment than Non Married (15.1%) individuals. (Fig 1).

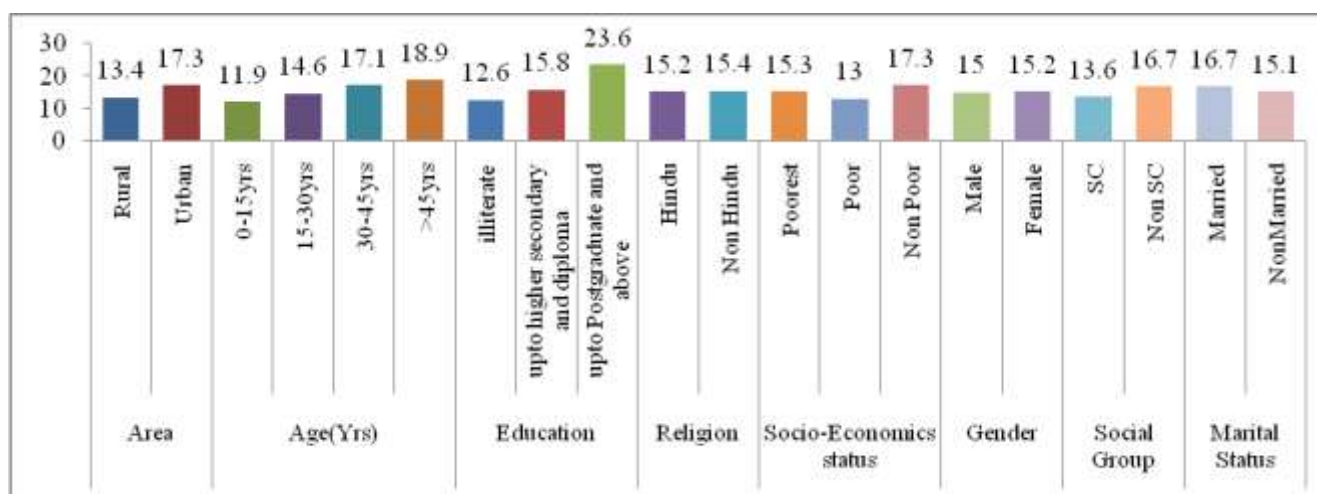




Fig 1: Showing the self reported enrolment in any health insurance schemes in India

Discussion:

Two major initiatives since the year 2005-06 in the Indian health sector are remarkable for giving a new direction to health system financing, namely: the NRHM and publicly-funded health insurance schemes (including RSBY, Rajiv Aarogya and the Tamil Nadu Chief Minister schemes, among others). NRHM largely relies (except for Janani Suraksha Yojana or the JSY scheme) on supply-side financing, through the traditional way of an integrated financing and provision functions under the umbrella of government ministries and departments. Before the beginning of the insurance schemes (2004-05), households' OOP expenses, by all categories – inpatient, outpatient and drugs, were reportedly higher in intervention districts as against non-intervention districts. This disparity continued to exist in the post-insurance years as well. Study revealed that 15.1% population have any health insurance which more than 5 % of households have health insurance at the national level surveys [23-24] and 29% in all states of India [25]. Study revealed that all states showed 13.4% enrolment in rural and 17.3% enrolment in urban areas where 28.2% in urban and 28.9% in rural [24].

Health insurance coverage in India is far from satisfactory. Less than one-third (29%) of households have at least one usual member covered under health insurance or health scheme [24]. Study revealed that 18.9% individuals with more than 45 years has more enrolment in insurance which is less than 20 % of women age 15-49 and 23 % of men age 15-49 are covered by health insurance or a health scheme. The highest proportion of households covered under health insurance or a health scheme is found in Andhra Pradesh (75%) and the lowest coverage (less than 5%) is in Lakshadweep, Manipur, and Jammu & Kashmir [24]. Study revealed that 13.4% enrolment in rural and 17.3% enrolment in urban and urban showed more enrolment insurance [24], where as rural (20.8%) showed more enrolment than urban (19.6%)[25]. Hindu (5.1%) showed less enrolment[24] and more enrolment in Hindu(21.4%)[25]. Study revealed that non poor household with Non Schedule caste showed more enrolment and non poor household with social group SC/ST households showed more enrolment in health insurance scheme[24-25]

Conclusion:

Community Based Health Insurance (CBHI) is more suitable arrangement for providing insurance to the poor. Development of private health insurance in the country has both potential risks and benefits in improving the access of the poor to health services. Appropriate regulatory changes can minimise the risks and turn potential benefits into concrete gains for the poor. However, currently even the private health insurance market lacks development for the want of proper regulatory decisions both on the supply of health services and on the demand for health insurance. In order to bring significant increase in enrolment, government need to frame their



policy, need to start awareness programme at ground levels. Government need to maximise their infrastructure and funds. As mostly policy in India (Private and public) is based on inpatient care only. So, government need to frame policies of out-patients care too and need to universalize in all states of India. States and centres maximum insurance policy are applicable only for poor populations, need to involves the other population in order to maximise the coverage of any health insurance schemes. In India, as in many other developing countries, high incurred health expenses push household towards poverty. The study shows the enrolment in insurance schemes is more in non poor household where poor household less enrolment. Mostly insurance schemes involve only poor people, including people and households below the poverty line. Might be inclusion of poor include an affordable premium, external assistance and nesting the scheme within a larger organization that addresses other needs of the poor .

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None.

Competing interests

The author declared that he has no competing interests.

Availability of data and materials

The source of data is a representative nationwide survey data collected by The National Sample Survey Organization (NSSO) is conducted after 10 years and data collected is representative nationwide. Data is available on public domain and can be procured from NSSO by paying a nominal charge.

Consent for publication

Not applicable.

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