Insurance for Better Health: Coverage of the Marginalized Under Health Insurance in India

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Dr. Vishal, Assistant Professor[1]; Prof. Aswini Kumar Nanda, Professor[1]
[1]Department of Economics, Central University of Jammu, Rayha-Suchani (Bagla), Distt. Samba-181143, Jammu and Kashmir, India

Abstract

In India, patronage of health insurance by the central as well as state governments has led to an uptick in its prevalence from 25.6 per cent in 2015-16 to 42.6 per cent in 2019-21 (IIPS, 2022). Higher cost of healthcare utilisation, catastrophic health expenditure (CHE) etc. are some leading concerns of spreading coverage under health insurance in billion-plus India where the households struggle with a double burden of diseases due to infectious as well as non-communicable diseases (NCDs). However, such unwelcome consequences of health insurance have been salient among the scheduled castes (SCs) who have been flagged as marginalised as well as vulnerable by the constitution of the country. Paper is a first-of-its-kind study on the SCs who constitute about 17.0 per cent of the total population and have not been part of any earlier studies on insurance at the pan India level. In this context, the current paper intends to not only discuss the level and trends in insurance coverage among the SCs but also the determinants of such coverage. The study uses data from the two recent National Family Health Survey (NFHS) rounds conducted at the state level during 2015-16 and 2019-21 covering 637 thousand households. Besides a comprehensive literature review, the paper undertakes logistic regression.

Analysis indicates that 43.5 per cent of the SCs households are covered under any health insurance (public or private or both) in 2019-21 as against 35.4 per cent of their general category (non-SC/ST/OBC) counterparts. In contrast, when seen by the nature of insurance providers, less than one percent of the SC households are covered under private health insurance, as compared to 2.5 percent of the general category households. This happens due to the inability of SCs to purchase private insurance. Unlike private insurance, public insurance is targeted, subsidised and laced with income and caste filters leading to high uptake among SCs.

Introduction

Economic conditions significantly impact human health. The relationship between the two is also moderated by insurance coverage—particularly in settings where out-of-pocket health expenditure (OOPHE) is substantial and routinely beyond the paying capacity of the individuals.

In low-income countries such as India, in 68 per cent of the cases, health care was financed out-of-pocket (OOP) in 2018, unlike in 11 per cent of the cases in developed nations such as the USA. Such an astronomically high OOPHE is socially undesirable and economically inefficient.

To keep the OOPHE relatively low, the states have been increasingly taking recourse to health insurance as a policy measure. In India, patronage of health insurance by the central as well as state governments has led to an uptick in its prevalence from 25.6 per cent in 2015-16 to 42.6 per cent in 2019-21 (IIPS, 2022).

However, such a rise in health insurance coverage has not been entirely free from negative fallouts. Higher cost of healthcare utilisation, catastrophic health expenditure (CHE) etc. are some leading concerns of spreading coverage under health insurance in billion plus India where the households struggle with double burden of the diseases due to the infectious as well as non-communicable diseases (NCDs). However, such unwelcome consequences of health insurance have been salient among the scheduled castes (SCs) who have been flagged as marginalised as well as vulnerable by the constitution of the country. In this context, the current paper intends to not only discuss the level and trends in insurance coverage among the SCs but also the determinants of such coverage.

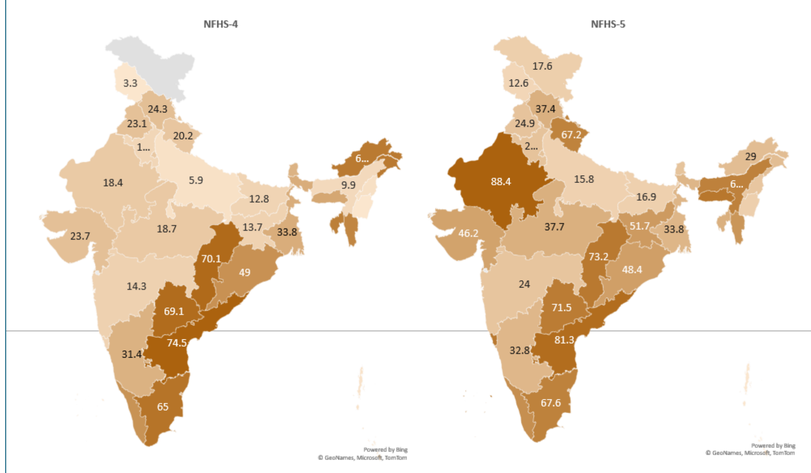
Methods and Materials

The proposed study uses cross-sectional data from the two recent National Family Health Survey (NFHS) rounds conducted at the state level during 2015-16 and 2019-21.

NFHS is a well-recognised source of information on selected dimensions of social, economic and health conditions of individuals in the about 637 thousand households collected through systematic stratified sampling design. Besides a comprehensive literature review, the paper undertakes multivariate analysis (binomial and multinomial logistic regression).

Results

Figure 1: State-wise insurance level among the households, India, 2019-21



Source: National Family Health Survey, 2019-21

Table 1: Percentage of HHs (any usual member) covered by health insurance scheme or health insurance by selected socio-economic determinants, India, 2019-21

Background characteristics	Yes	All
Sex of the HH Head		
Male	42.5	527220
Female	42.9	109463
Transgender	12.5	16
Place of residence		
Urban	39.7	160138
Rural	43.6	476561
Age of the HH Head (in completed years)		
0-14	8.3	12
15-59	42.5	463774
60+	42.8	172913
Wealth Index		
Poorest	40	148772
Poor	44.1	141152
Middle	45.1	129057
Richer	42.9	115002
Richest	40.8	102716
Religion of the HH Head		
Hindu	44.8	482073
Muslim	31.9	72584
Christian	44.8	49729
Sikh	26.7	13987
Buddhist/Neo-Buddhist	31.2	8905
Jain	46.1	901
Jewish	9.1	11
Parsi/Zoroastrian	25.9	27
No religion	27.9	408
other	36	8074
Caste of the HH Head		
Scheduled Caste	43.5	123002
Scheduled tribe	46.6	123443
Other Backward Class	44.2	233919
None	35.4	124385
Don't know	27.7	4310
Agricultural land ownership		
Yes	44.2	293598
No	41.3	343101
Any Member suffering from TB?		
Yes	44.5	6457
No	42.6	630242
Any Member suffering from any disability?		
Yes	43.8	24783
No	42.5	611916
Type of Health facility used when any member fall ill		
Public	47.2	371356
NGO/Charitable	37.2	2346
Private	36	255356
Self-medication	27.3	1975
Other	46	5666
Total	42.6	636699

Table 2: State-wise distribution of households according to the health insurance or scheme, India, 2019-21

States/U.Ts	Employee state insurance scheme	Central government health scheme	State health insurance scheme	RSBY	Community health insurance programme	Other health insurance through employer	Medical reimbursement through employer	Other privately purchased commercial health ins	Others	All
Jammu & Kashmir	6.5	1.5	2.0	0.3	0.0	0.3	0.1	0.8	1.5	18086
Himachal Pradesh	1.5	4.8	6.5	4.2	0.0	0.2	2.9	0.6	17.5	10698
Punjab	1.2	7.4	7.1	3.8	0.3	0.6	0.2	2.0	3.3	18824
Chandigarh	1.7	9.7	7.4	1.6	0.3	1.2	0.5	10.1	2.6	761
Uttarakhand	1.9	6.0	2.8	2.3	0.0	0.1	0.1	0.6	56.3	12169
Haryana	2.4	3.9	1.5	3.9	0.1	0.6	0.2	2.7	10.2	18229
NCT of Delhi	4.3	5.7	1.5	0.3	0.4	1.2	1.8	11.0	1.0	9486
Rajasthan	1.0	1.1	83.1	3.8	0.1	0.2	0.2	1.0	0.5	31817
Uttar Pradesh	0.4	0.9	0.2	1.1	0.0	0.1	0.1	0.4	12.6	70710
Bihar	0.2	1.3	0.2	3.1	0.0	0.0	0.0	0.2	11.9	35834
Sikkim	3.0	5.8	6.2	0.9	0.3	0.3	0.2	7.9	1.1	3516
Arunachal Pradesh	2.4	3.3	21.2	0.5	0.1	0.2	0.1	0.4	1.6	18268
Nagaland	0.2	1.7	0.2	0.5	0.1	0.1	0.3	0.2	5.9	10112
Manipur	0.3	5.7	5.2	14.9	0.0	0.1	0.1	0.5	5.2	7881
Mizoram	0.2	1.8	1.7	0.5	0.1	0.1	1.0	0.3	3.5	7257
Tripura	0.1	0.2	0.3	47.4	0.0	0.0	0.1	0.1	17.9	7209
Meghalaya	0.3	7.2	53.9	19.4	0.0	0.0	0.0	0.0	4.5	10148
Assam	0.5	0.4	0.3	0.7	0.0	0.3	0.0	0.3	66.0	30119
West Bengal	1.4	2.3	13.8	12.4	0.6	0.5	0.3	0.7	4.1	18187
Jharkhand	0.6	1.7	0.4	1.9	0.1	0.2	0.1	0.3	46.7	22863
Odisha	0.7	1.1	32.6	16.7	0.0	0.4	0.1	0.7	1.6	26467
Chhattisgarh	0.9	1.7	8.2	54.3	0.2	0.2	0.0	0.1	9.7	24550
Madhya Pradesh	0.5	5.1	2.2	5.4	0.1	0.2	0.1	0.6	24.4	43552
Gujarat	1.2	6.6	27.0	7.7	0.1	0.6	0.6	1.3	6.9	29368
Dadra & Nag and Dam & Diu	0.5	2.5	2.1	0.2	0.4	1.2	0.2	3.7	49.1	2676
Maharashtra	1.0	4.8	3.7	2.7	0.1	0.4	0.2	1.9	10.0	31643
Andhra Pradesh	2.3	2.5	77.3	0.7	0.0	0.2	0.2	2.1	1.5	11346
Karnataka	1.9	3.4	3.0	6.0	0.3	0.3	0.1	0.4	19.8	26574
Goa	5.2	1.2	60.0	0.0	0.1	1.0	0.9	1.3	7.3	1856
Lakshadweep	0.2	8.0	0.4	7.9	0.7	3.6	0.1	6.4	40.6	921
Kerala	1.7	2.1	2.4	47.1	0.1	0.4	0.2	3.5	2.7	12330
Tamil Nadu	3.2	10.6	59.2	0.2	0.1	1.1	0.4	1.3	0.2	27929
Puducherry	2.9	5.9	12.3	1.2	0.5	0.7	0.7	2.3	2.3	3520
Andaman & Nic Islands	0.2	1.3	0.0	0.1	0.0	0.2	0.0	0.3	0.4	2624
Telangana	2.6	0.7	67.6	0.1	0.1	0.4	0.2	0.6	0.4	27351
Ladakh	7.9	3.6	3.9	1.7	0.1	0.4	0.1	0.6	0.2	1818
Total	1.4	3.2	17.3	7.3	0.1	0.3	0.2	1.0	13.5	636699

Table 3: Percentage of HHs (any usual member) availing any health insurance scheme or health insurance by selected socio-economic determinants, India, 2019-21

States/U.Ts	Employee state insurance scheme	Central government health scheme	State health insurance scheme	RSBY	Community health insurance programme	Other health insurance through employer	Medical reimbursement through employer	Other privately purchased commerical health insurance	Others	All
Sex of the HH Head										
Male	1.5	3.2	17	7.3	0.1	0.4	0.3	1.1	13.5	527220
Female	1	3.1	18.5	7.3	0.1	0.2	0.2	0.8	13.3	109463
Transgender	0	0	6.3	0	0	0	0	0	6.3	16
Place of residence										
Urban	2.8	4.3	15.4	5.7	0.2	0.8	0.6	2.7	9.4	160138
Rural	0.9	2.8	17.9	7.9	0.1	0.2	0.1	0.5	14.9	476561
Age of the HH Head (in completed years)										
0-14	0	0	8.3	0	0	0	0	0	0	12
15-59	1.4	3.1	17.2	7.2	0.1	0.3	0.2	1	13.7	463774
60+	1.3	3.5	17.5	7.6	0.1	0.4	0.3	1.2	12.9	172913
Wealth Index										
Poorest	0.3	1.8	11.5	9.1	0.1	0	0	0.1	18.2	148772
Poor	0.4	2.5	18.4	7.6	0.1	0.1	0.1	0.2	16.3	141152
Middle	0.9	3.3	22	7.4	0.1	0.2	0.1	0.5	12.5	129057
Richer	1.9	3.7	20.4	7.1	0.1	0.4	0.3	1.0	10.1	115002
Richest	4.2	5.4	14.6	4.5	0.3	1.2	1	4.4	7.8	102716
Religion of the HH Head										
Hindu	1.4	3.3	18.7	7.3	0.1	0.4	0.3	1.1	14.3	482073
Muslim	1.6	1.6	9.1	4.2	0.1	0.2	0.1	0.6	15.3	72584
Christian	1	3.5	19.3	14.3	0.1	0.2	0.3	0.8	6.6	49729
Sikh	1.6	6.6	8.6	3.6	0.3	0.5	0.2	2.3	4	13987
Buddhist/Neo-Buddhist	2.3	4.2	10.7	4.1	0.1	0.2	0.7	1.8	7.9	8905
Jain	2.4	3.8	15.6	3.9	0.4	1.2	1.3	10.2	10	901
Jewish	0	0	0	0	0	0	0	9.1	0	11
Parsi/Zoroastrian	0	3.7	3.7	3.7	0	0	0	3.7	11.1	27
No religion	3.2	3.2	15	2.5	0	0	0.2	1.7	3.7	408
Other	1	2.6	16.2	2.5	0.1	0.1	0.1	0.4	13.9	8074
Caste of the HH Head										
Scheduled Caste	1.1	3.3	18.8	6.7	0.1	0.2	0.1	0.5	14.4	123002
Scheduled tribe	0.9	3.4	17.4	13	0.1	0.2	0.2	0.4	12.7	123443
Other Backward Class	1.3	3	20.9	6.5	0.1	0.4	0.2	0.9	13.2	233919
None	2.2	3.5	11.1	4.5	0.1	0.6	0.5	2.5	11.8	124385
Don't know	1.2	2	10.5	4.4	0.2	0.3	0.3	0.9	9.0	4310
Agricultural land ownership										
Yes	1.2	2.8	18.1	7.9	0.1	0.2	0.2	0.7	14.6	293598
No	1.5	3.5	16.5	6.9	0.1	0.4	0.3	1.3	12.5	343101
Any Member suffering from TB?										
Yes	1.4	3.2	17.6	8.5	0	0.2	0.2	0.6	14.4	6457
No	1.4	3.2	17.3	7.3	0.1	0.3	0.2	1.1	13.5	630242
Any Member suffering from any disability?										
Yes	1.0	3.4	17.5	8.2	0.1	0.3	0.1	0.8	14.4	24783
No	1.4	3.2	17.3	7.3	0.1	0.3	0.3	1.1	13.4	611916
Type of Health facility used when any member falls ill										
Public	1.3	3.5	19.6	9.7	0.1	0.2	0.2	0.7	13.9	371356
NGO/Charitable	2.8	3.2	14.6	3.7	0.1	0.7	0.5	1.9	12.1	2346
Private	1.4	2.9	14	4.1	0.1	0.5	0.3	1.6	12.8	255356
Self-medication	0.8	1.7	5.8	5.3	0.2	0.2	0.2	0.9	13	1975
Other	1.7	2.1	18.7	3.8	0.1	0.4	0.2	0.7	19.7	5666
Total	1.4	3.2	17.3	7.3	0.1	0.3	0.2	1.0	13.5	636699

Source: National Family Health Survey, 2019-21

Table 4: Socio-economic determinants of availing health insurance/scheme, India, 2019-20

States/U.Ts	β (S.E.)	Odds ratio	Confidence interval
Sex of the HH Head			
Male®			
Female	1.969** (1.044)	7.166	0.925-55.494
Transgender	1.993**	7.340	0.948-56.841
Place of residence			
Urban®			
Rural	-0.226*** (0.007)	0.798	0.786-0.810
Age of the HH Head (in completed years)	0.006*** (0.000)	1.006	1.005-1.006
Wealth Index	0.000*** (0.000)	1.000	1.000-1.000
Religion of the HH Head			
Hindu®			
Muslim	0.559*** (0.024)	1.748	1.666-1.834
Christian	-0.094*** (0.026)	0.910	0.864-0.958
Sikh	0.308*** (0.025)	1.361	1.295-1.4330
Buddhist/Neo-Buddhist	-0.265*** (0.032)	0.767	0.721-0.816
Jain	-0.300*** (0.034)	0.741	0.693-0.791
Jewish	0.891*** (2.439)	2.439	2.094-2.840
Parsi/Zoroastrian	-20.503 (12528.776)	0.000	0.000-0.000
No religion	-0.098 (0.476)	0.906	0.357-2.303
Other	-0.462*** (0.119)	0.630	0.499-0.796
Caste of the HH Head			
Scheduled Caste®			
Scheduled tribe	0.563*** (0.035)	1.756	1.640-1.882
Other Backward Class	0.724*** (0.035)	2.063	1.924-2.211
Unreserved	0.584*** (0.035)	1.793	1.674-1.920
Don't know	0.184*** (0.035)	1.201	1.121-1.287
Agricultural land ownership			
No®			
Yes	-0.056*** (0.006)	0.946	0.935-0.957
Any Member suffering from TB?			
No®			
Yes	-0.069*** (0.026)	0.933	0.886-0.982
Any Member suffering from any disability?			
No®			
Yes	-0.046*** (0.014)	0.955	0.929-0.981
Type of Health facility used when any member falls ill			
Public®			
NGO/Charitable	0.018 (0.027)	1.018	0.965-1.075
Private	-0.452*** (0.052)	0.637	0.575-0.704
Self-medication	-0.492*** (0.028)	0.611	0.579-0.645
Other	-0.774*** (0.058)	0.461	0.411-0.517

Contact

Dr. Vishal
Department of Economics,
Central University of Jammu, Distt. Samba, India.
Email: vishal.eco@cujammu.ac.in
vishalsinghmor@yahoo.com
Website: www.cujammu.ac.in
Phone: +91-99912 13108

References

Buchmueller, T. C., Jacobson, M., & Schmidt, L. (2016). The Effect of Health Insurance on Medical Care Utilization and Health Outcomes: A Review of the Literature. Health Affairs, 35(1), 1-10.

Ministry of Health and Family Welfare. (2021). National Family Health Survey (NFHS-5) 2019-21. Government of India.

Wagstaff, A. (2002). Poverty and Health Sector Inequalities. Bulletin of the World Health Organization, 80(2), 97-105