

# Barriers to the Subscription to Health Insurance: Case Study of some Backward Regions in India



## Sociology

**KEYWORDS :** health insurance, awareness, barriers to subscription, principal component analysis

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### ABSTRACT

*The present study is an effort to find out the response of the people of Darjeeling in the area of health insurance. As firstly, this study examines the respondents who are aware or not aware about health insurance as well as various sources of awareness; secondly, those who have not subscribed what are the reasons behind the same, i.e., what are the barriers of subscription to health insurance. The study was conducted in some selected villages in Darjeeling district and 200 questionnaires were got filled from general people. The results shown low level of awareness and five factors act as the basic barriers to the subscription for such an insurance scheme.*

India's tryst with health insurance program goes back to the late 1940s and early 1950s when the civil servants (Central Government Health Scheme) and formal sector workers (Employees' State Insurance Scheme) were enrolled into a contributory but heavily subsidized health insurance programs, although these programs, especially the CGHS was confined to only a small segment of the society. According to David Dror (2006, 2007) in a country where only 3% of the populations are affiliated to health insurance, most Indians must pay the major part of their health care cost out of pocket. This burden is particularly high for those who are afflicted by both poverty and illness. Therefore, according to him health insurance could be one of the most suitable solutions for poverty and illness nexus. Various studies also reveal that in India more than 80 percent of health care expenditure is borne by individuals i.e. health care financing is mainly in the form of out-of-pocket which gradually push them into a vicious circle of poverty. In such a situation health insurance is a widely recognized and preferable mechanism to finance the health care expenditures of the individuals. Sevaraj and Karan (2012) have revealed the fact that roughly one fourth of India's population is covered by any of the health insurance scheme in 2010. Under this light the major objective of this paper is to find out what are those factors that drive the people not to subscribe for a health insurance scheme, i.e., why people are ready to accept the burden of out of pocket payment of any severe health hazards.

### Data and Methods

In this backdrop, it seems imperative to analyze the issue of barriers to health insurance in two backward blocks of Darjeeling districts, namely, Naxalbari and Matigara. The study is based on entirely primary data collected from field survey. In this study of barriers to health insurance, those respondents were selected who have not subscribed for any health insurance scheme. A total of 200 respondents were interrogated from two blocks (100 from each) to answer questions related to socio economic status, awareness and source of awareness and questions related to barriers to the subscription of health insurance. In section 4 the detailed description of method is given.

### 3. Awareness level and source of Awareness for Health Insurance

Data show that awareness about health insurance has not reached to the level of subscription to health insurance products particularly among the rural and poor people of the country. It is clear from the table: 1 that percentage of people not at all aware was 65.5%. People who have already heard about health insurance yet not subscribed was 16% and presently only 18.5 % were having health insurance. Moreover there are a number of sources that generate awareness regarding health insurance. The awareness level from TV and newspaper that is media exposure stands at 24%, therefore friends and family stands at 26%, agents of insurance companies and tax consultants' stand at 43% and in some cases doctors have also played the role of awareness builder (7%).

**Table: 1 Awareness Level and Source of Awareness for Health Insurance**

Awareness about Health Insurance		
	No.	%
not aware	131	65.5
aware but do not subscribe	32	16
aware and subscribe	37	18.5
Source of awareness		
TV and news paper	16	24%
friends and family	18	26%
agent and tax consultant	30	43%
Doctor	5	7%
Total	69	100

### 4. Analysis of the Barriers in the Subscription to Health Insurance: Principal Component Analysis

There are a number of factors that act as barriers in case of the subscription towards health insurance. All these reasons/barriers were taken in the form of variables and respondents who are without health insurance were asked to give their response on a five point scale ranging from strongly agree to strongly disagree. Where 5 signifies strongly agree, 4 signifies agree, 3 signifies indifferent, 2 signifies disagree and 1 signifies strongly disagree. Thereafter Principal Component Analysis was run in order to condense these variables. All these variables are explained in table: 2

**Table: 2 Variables that Act as Barriers**

Variable	Description
V1	Low salary
V2	Non health expenditure is very high
V3	Easy loan from cooperative
V4	Saving money somewhere else
V5	Have taken LIC
V6	Unaware
V7	Hardly fall sick
V8	Never taken loan for sickness
V9	No one suggested
V10	No agent came to me
V11	Job category is riskless
V12	Happy with hospitals' cheap OPD services
V13	If no sickness won't get back the money
V14	Not reliable

V15	Do not cover all the needs
V16	No idea about hidden cost

0.000) at 120 degree of freedom which provided as well as support for the validity of data for factor analysis.

To test the sampling, Kaiser-Meyer-Olin measure of sampling adequacy is computed which is found to be 0.756. It indicates that volume of data is good enough for sampling. Moreover the overall significance of correlation matrices has been tested with Bartlett Test (approx. Chi-square = 3502.095 and significant at

After computing factor analysis over 16 factors it is found that there are 5 key factors, which are determined by clubbing the similar variables and ignoring the rest, that are considered intensifying the barriers in the subscription to health insurance. The table: 3 show the respective percentage of variance of all these factors derived from factor analysis.

**Table: 3 Total Variance Explained by Various Factors**

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.484	34.277	34.277	5.484	34.277	34.277	4.773	29.832	29.832
2	3.566	22.285	56.562	3.566	22.285	56.562	3.023	18.897	48.729
3	1.407	8.797	65.358	1.407	8.797	65.358	1.998	12.485	61.214
4	1.230	7.685	73.043	1.230	7.685	73.043	1.818	11.362	72.577
5	1.178	7.365	80.409	1.178	7.365	80.409	1.253	7.832	80.409
6	.916	5.723	86.131						
7	.607	3.796	89.928						
8	.543	3.395	93.322						
9	.306	1.914	95.237						
10	.291	1.818	97.055						
11	.191	1.192	98.246						
12	.152	.949	99.196						
13	7.022E-02	.439	99.634						
14	5.610E-02	.351	99.985						
15	1.347E-03	8.416E-03	99.993						
16	1.048E-03	6.550E-03	100.000						

Extraction Method: Principal Component Analysis.

It is observed from table: 3 that only 5 factors have Eigen value more than one, so accordingly we proceed with these factors. The total variance explained by factor 1, 2, 3, 4 and 5 are 29.832%, 18.897%, 12.485%, 11.362% and 7.832% respectively, whereas the cumulative variance explained by all these factors is 80.409 percent.

**Table: 4 Rotated Component Matrixes:**

COMPONENT	1	2	3	4	5
VAR00001	.862	-1.350E-02	-5.795E-02	.347	-4.943E-02
VAR00002	.660	-1.731E-02	-.105	.484	-.293
VAR00003	.307	.436	-.105	.528	-8.603E-02
VAR00004	-.913	-6.448E-02	6.423E-02	.212	2.559E-02
VAR00005	-.907	-6.512E-02	6.996E-02	.220	2.540E-02
VAR00006	7.884E-02	.910	.186	-1.773E-02	9.238E-02
VAR00007	-1.763E-03	.963	.176	-3.978E-02	6.183E-03
VAR00008	4.442E-04	.963	.176	-3.930E-02	2.548E-03
VAR00009	-8.091E-02	.238	.959	-7.303E-02	-3.964E-02
VAR00010	-8.010E-02	.240	.959	-7.225E-02	-3.755E-02
VAR00011	-3.864E-03	6.740E-02	-7.899E-02	-9.460E-02	.935
VAR00012	.646	-5.399E-02	4.423E-02	.471	.375
VAR00013	.667	9.885E-02	-6.606E-02	.217	-1.822E-02
VAR00014	.615	2.231E-02	9.014E-02	.542	.310
VAR00015	-2.263E-02	.104	7.755E-02	-.588	7.525E-02
VAR00016	.763	-1.578E-02	-8.057E-03	.400	.168

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 9 iterations.

Table: 4 shows that each statement corresponding to the highlighted factor loading is correlated with the factor corresponding to that factor loading. Higher the factor loading, stronger is the correlation between the factors and statement. On the basis of rotated component matrix the factor extraction table has been prepared, which is shown in the following table (Table: 5).

**Table: 5 Factor Extraction Table**

Factors	% of Variance	Factor Interpretation	Variables Included in the factor	Loading
F1	29.832	Lack of fund and reliability	1. Low salary	0.862
			2. Non health expenditure is very high.	0.660
			3. Happy with hospitals' cheap OPD services.	0.646
			4. If no sickness won't get back the money.	0.667
			5. No idea about hidden cost.	0.763
			6. Not reliable	0.615
F2	18.897	Lack of awareness and willingness	1. Unaware.	0.910
			2. Hardly fall sick	0.963
			3. Never taken loan for sickness.	0.963
			4. Do not cover all the health needs.	0.104
F3	12.485	'lack of intermediaries' outreach	1. No one suggested.	0.959
			2. No agent came to me.	0.959
F4	11.362	Prefer other mode of investment	1. Easy loan from cooperative.	0.528
			2. Saving money somewhere else.	0.212
			3. Have taken LIC	0.220
F5	7.832	Associated with risk less job	1. Job category is riskless.	0.935

Table: 5 shows the five factors which are extracted and the variables associated with those factors with their respective loadings. The above stated factors are in the order of degree of importance, the first factor is more important than the second factor, the second factor is important than factor 3 and so on. The factor 1 and 2 has 29.832% and 18.897 of variance which is the highest variance as compared with factor 3, 4 and 5 where % of variance is 12.485, 11.362 and 7.832. Hence it is found that Lack of Funds to Meet Costly Affair and reliability; Lack of Awareness and Willingness to join; Lack of Intermediaries' Outreach; prefer other modes of investment and associated with risky jobs are acting as main barriers in the subscription to health insurance.

**4. Conclusion**

Although health insurance is not a new concept and with the time more and more people are getting aware about it, but this awareness has not reach to that extent that people subscribe for it. As a result it was found from this study that just 18.5% are being covered by some form of health insurance and large portion of the population is still financing health care expenditure out of pocket. As reasons behind this choice the respondents expressed that lack of fund and reliability is the foremost barrier to subscribe for health insurance schemes. Then comes the other factors such as lack of awareness and willingness to join; lack of intermediaries' outreach; prefer other modes of investment and associated with risky jobs.

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