

Factors Affecting The Selection Of Health Insurance : An Empirical Study

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INTRODUCTION

A human being can manage to live without a good education...without a splendid car...without an opulent house..., but no one can manage to live without good and excellent health, that too when he/she is living below the poverty line. The reason behind this is, "how the poor can approach the good hospitals like Fortis and others to get good-quality treatment, and how the same can contribute towards the development of a nation?"

Moreover, poor health leads to a never ending vicious circle of poverty, because an individual without good health is unable to work, no work means no earnings, and such a person is unable to support himself. So the question arises, what is the need of hour? Should a person first have access to good education; a splendid car; an opulent house? Certainly, the answer would be "No". Every human being primarily should have access to good health care services, and that too, at a low cost. One solution is to take a good health insurance scheme, which is a widely recognized mechanism to finance the healthcare needs of an individual because he/she has to make a gradual contribution for the premium of the insurance scheme.

The credit for the origination of the concept of health insurance goes to Hugh the Elder Chamberlen from the Peter Chamberlen family, who proposed it for the first time in 1694. In the late 19th century, "Accidental Insurance" began, which operated much like modern "Disability Insurance". It was firstly offered by Franklin Health Assurance Co. of US, which was founded in 1850. It provides coverage for the accidents in case of rail, road and steamboat accidents. This payment model continued until the start of the 20th century in some jurisdictions like California. Thereafter, it came into light in other parts of the world (Source: 10th Global Conference of Actuaries (<http://www.actuariesindia.org/GCA/10th%20GCA/Volumes.htm>)).

In India, health insurance found the new track of success and growth in the year 1999, with the passage of Insurance Regulatory and Development Authority (IRDA) Bill in the Parliament. Thereafter, the Insurance Regulatory and Development Authority (IRDA), since its incorporation in April 2000, has fastidiously stuck to its schedule of framing regulations and opening up the insurance sector to private players by allowing 26 % Foreign Direct Investment (FDI) in the insurance sector. Moreover, IRDA has introduced several insurance regulations, including provisions for Third Party Administrators (TPAs) to support the administration and management of health insurance products offered by insurance companies. So, during this period, private health insurance products integrated with the services of TPA were introduced. One of the recent health insurance schemes introduced was the Rashtriya Swasthya Bima Yojana (RSBY) in the year 2008-09, which covers all the Below Poverty Line (BPL) families in the country. No doubt, the owner of the scheme is the state government, but it is also financed by the central government because it shares the premium subsidy upto 75% (Swarup, 2008).

From the above information, it is certain that no doubt the Health Insurance is of recent origin, but the rapid growth of it talks about its importance in the country. It is one of the emerging segments for both life and general insurance companies as the Insurance Act, 1938 has allowed both life and general insurance companies to sell health insurance schemes to both individuals and groups, and the Insurance Act, 1938 has further stated that IRDA should give preference to those insurers, who plan to have focus on health insurance too at the time of granting certificate of registration.

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REVIEW OF LITERATURE

This section deals with the review of the various studies conducted by the researchers, having direct or indirect relation with the present study. This review will be helpful in identifying the research gaps, underlying the need of the study and specifying its objectives. Sanyal (1996) examined that the burden of health care expenditure in the rural areas was twice in 1986-87 as compared to 1963-64, and supported the view that avenues for additional revenue earning lie more in the secondary and tertiary hospitals. The study suggested that some introspection is needed, particularly when the abnormal increase in prices of medical care took place as compared to the non-food items, but still, there is an increased burden of health care expenditure and concluded that the health planners would have to pay more consideration towards this aspect in order to enhance health care services at a reasonable cost. Sodani P.R. (2001) investigated the community's preference on the various aspects of health insurance. The study revealed a low level of awareness about health insurance, and also provided evidence that quality of care and cost are the two important factors affecting the community's decision to subscribe to any new health insurance plan. Gupta (2002) analyzed whether individuals and households would be willing to participate in private health insurance schemes or not. The study shows that high willingness to participate in the insurance programme was mainly from low-income individuals, because the middle and high-income households already have some form of insurance. All low-income individuals want health insurance at a low cost, so the minimum price is the main force governing their selection for health insurance products. Matthies and Cahill (2004) observed that a level playing field with adequate consumer protection created through the legal regulatory framework is necessary for the participation of individuals in health insurance, but is not sufficient to promote development of the health insurance market. Asgary, Willis, Taghviri and Refeian (2004) estimated the Demand and Willingness to Pay (WTP) for health insurance by rural households in Iran and provided that a significant percentage of the population (more than 38%) lives in rural areas. In order to provide rural areas with the same level of protection as urban areas, the difference would have to be subsidized, and the policy makers would need to consider this difference in WTP in a different region of the country in policy formulation. Dror (2006) had considered seven myths regarding health insurance and examined the realities behind these myths. The study concluded that income of the people affects their willingness to participate in health insurance, and most of the people are willing to pay 1.35% of their income or more for health insurance. Ramani and Mavalankar (2006) attempted to examine the health system in India and showed that health and socio-economic development are so closely related, that it is impossible to achieve one without the other. The study concluded that identifying the role and responsibilities of various stakeholders is necessary for building an efficient and effective health system, and that is also necessary for the participation of more individuals in the health insurance schemes. Dror (2007) examined why the "one-size-fits-all" health insurance products are not suitable to low income persons in India. The study provided the evidence that existence of considerable variability to pay for health insurance is because of multiple reasons like variability in income, frequency of illness among households, quality and proximity of providers (private, public) in different locations. Moreover, the study suggested that policy makers should consider this variability to pay, in order to ensure more participation of people in health insurance products. Kipp and Snook (2008) provided that in order to be more successful in the area of health insurance, insurers have to classify the risk in accordance with the individuals' profile and price them accordingly i.e. the individuals' characteristics and price of the products widely affect their participation in health insurance.

NEED AND OBJECTIVE OF THE STUDY

From the review of literature, it came to light that there is a dire need to study the state of health insurance in general, and the factors affecting the selection of health insurance by an individual, in particular. The reason is attributable to the fact that, firstly; this is one of the growing businesses now- a- days and secondly; it is the need of the hour. Moreover, in India, around 94 percent of the total work force is in the unorganized sector, and one of the major problems among them is the frequent incidence of illness and need for medical care and hospitalization. No doubt, the health care facilities have expanded a lot, but still, one of the urgent and vexing problems faced by Indian people, especially the people residing in rural areas is, no awareness or little awareness regarding health insurance products. In the emerging era, health insurance has been clearly recognized as a mechanism, tool and device to provide protection to households against the risk of spending on health. Besides this, the review of literature has provided us an insight that significant studies have not been conducted in the Amritsar district of Punjab. So, the present study

focuses on this aspect and was conducted with a view to investigate and examine the various factors affecting the selection for health insurance. On the whole, this is an effort in the field of health insurance to know about what are the various factors governing the selection of health insurance by an individual.

DATABASE AND RESEARCH METHODOLOGY

This is a research article based on the study conducted in the Amritsar district of Punjab. The information forming a part of the research was obtained through a self-structured questionnaire, with the geographical focus on Amritsar district of Punjab. A total of 180 respondents were considered by following the convenience sampling method. Firstly, a pilot study was done by taking the information from 25 respondents forming a part of the sample, in order to find out the appropriateness of the questionnaire.

The factor analysis has been used to draw the meaningful inference from the study. It is a general name denoting a class of procedures primarily used for data reduction and summarization. In research, there may be a large number of variables, most of which are correlated and which must be reduced to a manageable level. Relationships among set of many interrelated variables were examined and are represented with the help of factor analysis. The approach used in the factor analysis is "Principal Component Analysis". In this component analysis, the total variance in the data is considered. The diagonal of the correlation matrix consists of unities, and full variance is brought in to the factor matrix. It determines the minimum number of factors that will account for maximum variance in the data for use in subsequent multivariate analysis. The factors are also called principal components. Although the initial or unrotated factor matrix indicates the relationship between the factors and individual variables, it seldom results in factors that can be interpreted, because the factors are correlated with many variables. Hence, the variance explained by each factor is redistributed by rotation. The method used for rotation in this study is "Varimax". It is a method of factor

Table 1: The List Of Variables Along With Their Description	
Variable	Description
V1	Name and Reputation of the insurance company.
V2	Use of modern technology by the insurance company.
V3	Courteousness of employees, brokers and corporate agents.
V4	Capability and knowledge of employees, brokers and corporate agents.
V5	Services provided by the employees, brokers and corporate agents.
V6	Availability of maximum consumable income.
V7	Use of extensive promotional activities.
V8	Maximum customers' satisfaction.
V9	Prompt claim processing with least of formalities.
V10	Availability of loan facility to meet all associated cost of health insurance.
V11	Minimum co-payment involved.
V12	Minimum deductible applicable.
V13	Nominal premium charged.
V14	Wide policy options.
V15	Reliability of services offered.
V16	Employer's contribution towards premium payment.
V17	Comprehensive coverage.
V18	Cash less facility.
V19	Easy accessibility of linked hospitals.
V20	Easy availability of services in hospitals.
V21	Flexibility of policy offered.
V22	Availability of tax benefits.
V23	Goodwill and Linkage of company with Third Party Administrators (TPAs).

rotation that minimizes the numbers of variables with high loading on a factor, thereby enhancing the interpretability of the factors (Source: Malhotra, 2007).

There are number of factors, which affect the selection of health insurance or are considered by an individual when buying a health insurance policy. All these factors are considered in the form of variables and are shown in the Table 1 along with their description. For all these factors, the respondents were requested to give their response on a five point likert scale ranging from very important factors to not all important factors, where 5 signifies the very important factor, 4 signifies an important factor, 3 signifies a not so important factor, 2 signifies unimportant factor and 1 signifies not at all important factor.

EMPIRICAL RESULTS, ANALYSIS AND INTERPRETATION

Table 2: The General Background Of The Respondents		
Gender	Frequency	Percentage
Male	166	92.2
Female	14	7.8
Total	180	100
Age	Frequency	Percentage
Less than 30 years	20	11.2
30-40 years	74	41.2
40-50 years	53	29.3
Above 50 years	33	18.3
Total	180	100
Education	Frequency	Percentage
Upto Matric	35	19.4
Higher Education	48	26.7
Graduation	51	28.3
Post Graduation	43	23.9
Vocational	2	1.1
Other	1	0.6
Total	180	100

Table 2 shows that a significant proportion of the sample was male members, and a majority of the respondents belonged to the age group of 30-40 years. As far as the level of education is concerned, the maximum number of respondents were Graduates.

Before the application of factor analysis, the reliability of scale items was tested with the application of Cronbach's alpha. The value of all factors ranged between 0.87 to 0.98, indicating the presence of internal consistency. Further, to test the sampling, Kaiser-Meyer-Olkin measure of sampling adequacy was computed, which was found to be 0.620. It indicated that the sample was good enough for sampling. Moreover, the overall significance of correlation matrices was tested with Bartlett Test (approx. Chi-square= 216 and significant at 0.000), which provided support for the validity of data for factor analysis. All this provided that we can proceed with factor analysis and the result of factor analysis over 23 factors showed that there are 7 factors, which were determined by clubbing the similar variables and ignoring the rest, which majorly were considered to be the most important. The Table 3 shows the respective percentage of variance of all the factors derived from the factor analysis.

It is observed from the Table 3 that only 7 factors had Eigen value more than one, so accordingly, the researchers preceded with these factors. The total variance explained by factor 1, 2, 3,4,5,6 and 7 was 16.466, 13.695, 12.346, 10.611, 7.685, 7.263 and 6.804 percent of variance, whereas, the cumulative variance explained by all these factors was 74.686 percent, and rest of the variance was due to the factors which are beyond the scope of the present study.

The Table 4 shows that each statement corresponding to the highlighted factor loading is correlated with the factor

Table 3 : The Total Variance of Various Factors

Var	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.945	25.849	25.849	5.945	25.849	25.849	3.787	16.466	16.466
2	2.929	12.736	38.585	2.929	12.736	38.585	3.150	13.695	30.161
3	2.334	10.150	48.735	2.334	10.150	48.735	2.839	12.346	42.506
4	1.791	7.787	56.522	1.791	7.787	56.522	2.440	10.611	53.117
5	1.727	7.508	64.030	1.727	7.508	64.030	1.768	7.685	60.802
6	1.412	6.138	70.168	1.412	6.138	70.168	1.670	7.263	68.065
7	1.081	4.701	74.868	1.081	4.701	74.868	1.565	6.804	74.868
8	.983	4.274	79.142						
9	.848	3.688	82.831						
10	.770	3.349	86.180						
11	.626	2.724	88.904						
12	.562	2.443	91.347						
13	.419	1.821	93.167						
14	.368	1.601	94.768						
15	.297	1.291	96.059						
16	.244	1.063	97.122						
17	.205	.893	98.015						
18	.154	.669	98.684						
19	.133	.580	99.264						
20	.093	.403	99.667						
21	.056	.245	99.913						
22	.014	.063	99.975						
23	.006	.025	100.000						

Extraction Method: Principal Component Analysis.

Table 4: The Rotated Component Matrix Of Various Factors

	Component						
	1	2	3	4	5	6	7
V1	-.102	-.046	.171	.294	.091	.712	-.016
V2	.207	.151	.172	.243	.143	-.005	-.711
V3	.099	-.158	.189	.852	.065	-.130	-.068
V4	.180	.062	.156	.742	-.018	.081	-.035
V5	.162	.145	-.111	.553	.155	.154	.074
V6	.075	.057	.777	.425	-.079	-.099	-.103
V7	.208	.119	.233	.328	-.537	-.342	.402
V8	.382	.236	-.024	.141	.225	-.096	.710
V9	.714	.274	.230	.239	.033	.224	.218
V10	.529	.265	.576	.094	-.011	-.073	.066
V11	-.410	.497	.076	.114	.399	.261	.165
V12	.067	.909	.057	-.134	-.017	.029	-.183
V13	.175	.877	-.226	.068	-.012	-.134	.105
V14	-.024	.666	.584	-.035	.234	.115	-.001

V15	.062	.745	.266	.153	-.222	-.058	.098
V16	.008	-.024	-.682	.192	-.307	.174	.355
V17	.740	.026	.063	.180	-.123	.229	-.072
V18	.513	.007	.601	.267	.135	.307	.058
V19	.850	.069	.012	.143	.083	-.234	-.011
V20	.848	-.052	.059	.041	.286	-.110	.042
V21	.364	-.056	.474	.154	.505	-.029	.316
V22	.275	-.053	.222	.249	.788	-.068	-.021
V23	-.116	-.001	.293	.172	.085	-.757	.055

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 Rotation converged in 11 iterations.

Factors	% of Variance	Factor Interpretation	Variables Included in the factor	Loading
F1	16.466	Ease with which Services can be availed	• Prompt claim processing (V9)	.714
			• Comprehensive coverage (V17)	.740
			• Cash less facilities (V18)	.513
			• Easy accessibility of linked hospital (V19)	.850
			• Easy availability of services in hospitals (V20)	.848
F2	13.695	Minimum Consideration	• Minimum co-payment involved (V11)	.497
			• Minimum deductible applicable (V12)	.909
			• Nominal premium charged (V13)	.877
			• Wide policy options (V14)	.666
			• Reliability of services (V15)	.745
F3	12.346	Availability of Funds (whether in hand or from outside)	• Availability of maximum consumable income (V6)	.777
			• Availability of loan facility for making premium payment (V10)	.576
			• Employer's contribution towards the premium payment (V16)	-.682
F4	10.611	Intermediaries' Outreach and Capabilities	• Courteousness of the employees, brokers and agents (V3)	.852
			• Capability and knowledge of the employees, brokers and agents (V4)	.742
			• Services provided by the employees, brokers and agents (V5)	.553
F5	7.685	Multiplicity of Benefits with Extensive Promotional Activities	• Use of extensive promotional activities (V7)	-.537
			• Tax benefits (V21)	.505
			• Flexibility of policy offered (V22)	.788
F6	7.263	Goodwill and Linkage of the Company	• Name and reputation of the company (V1)	.712
			• Linkage with Third Party Administrator (TPA) and their services (V23)	-.757
F7	6.804	Use of modern technology	• Use of modern technology (V2)	-.711
			• Maximum satisfaction to customers (V8)	.710

corresponding to that factor loading. Higher the factor loading, the stronger is the correlation between the factors and the statements. On the basis of rotated component matrix, the factor extraction Table was prepared.

The above stated factors are in the order of degree of importance i.e. factor 1 is more important than factor 2; factor 2 is more important than factor 3 and so on. The factor 1 and 2 have 16.466%, 13.695% of variance, which is the highest variance as compared with factor 3, 4, 5, 6 and 7 where % of variance is 12.346, 10.611, 7.685, 7.263 and 6.804. Hence, it was found that ease with which services can be availed and minimum consideration are the most important

factors affecting the selection of health insurance.

CONCLUSION

The present study was conducted with a view to investigate and examine the various factors affecting and governing the selection for health insurance by an individual 7 key factors were clubbed with the related variables namely, ease with which services can be availed; minimum consideration; availability of funds (whether in hand or from outside); intermediaries' outreach and capabilities; multiplicity of benefits with extensive promotional activities; goodwill and linkage of the company with Third Party Administrators (TPAs) and operating with customers' oriented modern technology were the main factors, which are considered by an individual while selecting or buying health insurance. The present study has implications both for the insurance companies as well as for IRDA, which is regulating the insurance companies. The study has highlighted that the ease with which the services can be availed, and minimum consideration are the highly considered factors by an individual. So, the insurance companies, whenever framing new health insurance products or modifying existing health insurance products, should highly consider these factors from the perceptive of their clients. Similarly, the IRDA should frame and implement the norms by considering the afore-discussed factors.

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