ANALYSIS OF SATISFACTION OF BENEFICIARIES FROM THE HEALTH INSURANCE SCHEMES SPONSORED BY GOVERNMENT OF TAMIL NADU

Prof.V.Pugazhenthi[1] , Dr.A.Jalal[2] & Dr.C.Sunitha[3]

[1.]*Associate Professor of Commerce, Rajah Serfoji Government College, Thanjavur, Tamil Nadu,*

[2.]*Principal, Khadir Mohideen College, Adirampattinam, Tamil Nadu,*

[3.]*Associate Professor of Economics, Rajah Serfoji Government College, Thanjavur, Tamil Nadu,*

ABSTRACT

In case of Government Sponsored Health Insurance Schemes, merely because of the fact that the insurance premium is subsidized by the Government, the ultimate beneficiaries should not be deprived of the due benefits and their satisfaction should not be taken granted. Because, though the service is free of cost at the receiver's end, full amount of insurance premium is paid by the Government to the insurer and in turn, full amount of the cost of the treatment is paid to the service providing hospitals. If the satisfaction and the expected treatment are ignored, it will be yet another subsidized endeavor to go in vein. So the researchers take one of the most successful Government Sponsored Health Insurance Scheme, 'Chief Minister's Comprehensive Health Insurance Scheme' of Government of Tamil Nadu to analyse the satisfaction level of the beneficiaries. In the present study from three hundred beneficiaries of the health insurance schemes of Government of Tamil Nadu document the satisfaction level, the relationship of the same with awareness level and the key determinants of overall satisfaction.

KEY WORDS: *Government Sponsored Health Insurance Scheme, Chief Minister's Comprehensive Health Insurance Scheme, Government of Tamil Nadu, Health insurance,*

JEL Classification: *H51, H53, H75, G22*

INTRODUCTION

Tamil Nadu is one of the best performing States in India and has consistently strived for ensuring that the citizens are provided with the best possible medical care. In Tamil Nadu, health services are delivered free of cost to the poor through a network of 8706 Health Sub Centres (HSCs), 1614 Primary Health Centres (PHCs), 237 Taluk / Sub-District Hospitals, 30 District Headquarters Hospitals and 43 Government Medical College Hospitals. Still to plug the gap in the public health care system and to ensure quality care even to the last citizen of the state Government of Tamil Nadu launched 'Chief Minister Kalaignar's Insurance Scheme for Life Saving Treatments' in 2009 (later modified as Chief Minister's Comprehensive Health Insurance Scheme, 2012).

'Chief Minister's Insurance Scheme for Life Saving Treatments' (CMKHIS) was launched in the year 2009 to ensure that poor and low income groups who cannot afford costly treatment, are able to get free treatment in Government as well as private hospitals for serious ailments. Although the general public is greatly benefited by availing treatment in the improved Government hospitals for most of the diseases the poor and downtrodden still had to access private hospitals for serious illnesses like cancer, heart diseases, kidney failure, brain and spinal problems and life threatening accidents. It is not possible for the poor to bear the expenses towards treatment for such life threatening diseases. Considering these facts, under this scheme, each beneficiary family was insured for availing free treatment up to Rs.1 lakh. The Government paid the entire premium for this purpose. About one crore poor families in the State were covered from this revolutionary scheme. Later this scheme was modified with extended coverage in the year 2011 and re-launched in the name of 'Chief Minister's Comprehensive Health Insurance Scheme'

(CMCHIS). Under this scheme, the sum assured for each is revised as Rs.1 lakh every year for a total period of four years and for a total value of Rs. 4 lakh. In the case of certain procedures, the ceiling may be raised to Rs.1.5 lakh per annum. The scheme covers 1,016 procedures, 113 follow up procedures and 23 diagnostic procedures.

IMPORTANCE OF THE STUDY

The growth of health insurance in India requires a better understanding of the perceptions of healthcare providers and the stakeholders. Given the lack of affordability of the poor, low penetration of health insurance, any attempt towards attaining the universal healthcare should be necessarily undertaken. The problems at the grass root level should be identified and cured at the infant stage itself. Merely because of the fact that the insurance premium is subsidized by the Government, the ultimate beneficiaries should not be deprived of the due benefits. Thus it is very important to study the Government sponsored health insurance schemes at this juncture. So the present study is undertaken to identify the extent of satisfaction about the CMCHIS.

OBJECTIVES OF THE STUDY

Following are the objectives of the study:

1. To study the satisfaction level of the beneficiaries of Tamil Nadu Government-sponsored health insurance schemes CMKHIS and CMCHIS- with the help of weighted average scores, assigning 1,2,3,4 and 5 marks to the responses Highly Dissatisfied(HDS), Dissatisfied(DS), Neutral(N), Satisfied(S) and Highly Satisfied(HS) respectively.

2. To enquire into the relationship between the awareness of the beneficiaries and satisfaction towards the schemes- with the help of correlation.

3. To spot out the important elements of satisfaction that influences the overall satisfaction of beneficiaries of the Health Insurance Schemes- with the help of factor analysis.

METHODOLOGY

Officially the smart cards were issued to 4,75,988 families in Thanjavur District itself till August 15, 2013 and the enrolment is still going under the CMCHIS. As the insured population is too big to cover, only those who availed the insurance benefits were alone considered. And in the past five years i.e., from 2007-08 to 2012-13, every year nearly four thousand people got treatment under both the schemes collectively which again constitute a total population of nearly twenty thousands. So, considering the constraints in tracing the beneficiaries and the adequacy to establish the representative responses, the sample size of 300 was determined.

The schemes was revised once making positive additions in all the spheres i.e., the CMKHIS was converted into CMCHIS in January 2012, after two and a half years. It was decided to give equal weightage of sampling between the two versions i.e., 150 samples from the beneficiary list of CMKHIS and CMCHIS. These 150 samples again were stratified between male and female beneficiaries under each scheme. Though the secondary data spells out that the male beneficiaries are more in numbers, the difference is not significant enough. So, the 150 samples were divided again giving equal weightage to the sex. The field study was undertaken in the year 2013-14.

1. OVERVIEW OF LEVEL OF SATISFACTION OF BENEFICIARIES

To analyze the satisfaction level among the respondents of CMKHIS and CMCHIS, fourteen variables were finalized and the respondents were asked to register the degree of satisfaction regarding the health insurance scheme under which they got treated. The 14 variables marked in numerals 1 to 14 in the Table denote 1.Terms and conditions of the Health Insurance scheme, 2.Quality of treatment, 3.Kindness of doctors, 4.Behaviour of hospital staff, 5.Quality of Medicines, 6.Diagnosis procedure, 7.Room comfort, 8.Infrastructure of the hospital, 9.Hospital environment, 10.Admission procedure, 11.Claim processing, 12.support of Liaison officer, 13.Post-operative care and 14.Discharge procedures. Satisfaction with the hospital environment is extremely high with a mean score of 4.07. In other words, nearly 80% satisfaction is exposed by the respondents. It is followed by satisfaction with terms and conditions of the Health Insurance scheme (3.97), Infrastructure of the hospital (3.92), Support of Liaison officer (3.87), Medicine quality (3.84), Post-operative care (3.78), Diagnosis procedure (3.75), Kindness of doctors (3.71), Behaviour of hospital staff (3.70), Room comfort (3.69), Admission procedure (3.57), Quality of treatment (3.5), Claim processing (3.48) and Discharge procedures (3.36).

Table – 1 The satisfaction level of CMKHIS/CMCHIS Beneficiaries

Level		1	2	3	4	5	6	7	8	9	10	11	12	13	14	Overall
							Satisfaction Variables									
T1	HDS	0	0	0	0	2	1	2	2	2	3	0	0	0	2	0
	DS	3	7	8	7	3	2	2	4	2	7	10	4	5	9	3
	N	17	58	47	38	30	37	53	31	21	55	64	23	33	70	25
	S	115	85	85	103	114	109	77	87	95	78	75	122	104	66	122
	HS	15	0	10	2	1	1	16	26	30	7	1	1	8	3	0
	Total	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
T2	HDS	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0
	DS	0	5	3	5	0	3	2	3	1	5	6	0	1	10	0
	N	12	69	40	34	10	26	55	24	12	56	65	12	33	76	18
	S	127	76	94	108	136	120	76	93	100	80	76	136	113	62	132
	HS	11	0	13	3	4	1	16	29	37	9	3	2	3	0	0
	Total	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
T1& T2	HDS	0	0	0	0	2	1	3	3	2	3	0	0	0	4	0
	DS	3	12	11	12	3	5	4	7	3	12	16	4	6	19	3
	N	29	127	87	72	40	63	108	55	33	111	129	35	66	146	43
	S	242	161	179	211	250	229	153	180	195	158	151	258	217	128	254
	HS	26	0	23	5	5	2	32	55	67	16	4	3	11	3	0
	Total	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
$Mean_1$		3.95	3.52	3.65	3.67	3.73	3.71	3.69	3.87	3.99	3.53	3.45	3.8	3.77	3.39	3.79
$Mean_2$		3.99	3.47	3.78	3.73	3.96	3.79	3.69	3.97	4.15	3.62	3.51	3.93	3.79	3.32	3.88
$Mean_{1,2}$		3.97	3.5	3.71	3.7	3.84	3.75	3.69	3.92	4.07	3.57	3.48	3.87	3.78	3.36	3.84
$S.D._{-1}$		0.54	0.59	0.69	0.59	0.58	0.54	0.73	0.77	0.72	0.75	0.63	0.48	0.6	0.69	0.45
$S.D._{-2}$		0.39	0.56	0.62	0.55	0.3	0.47	0.7	0.7	0.58	0.65	0.61	0.3	0.47	0.66	0.33
$S.D._{-1,2}$		0.47	0.58	0.66	0.57	0.48	0.5	0.72	0.74	0.66	0.7	0.62	0.4	0.54	0.68	0.4

Source: Primary data

Similarly, the overall satisfaction average score of 3.84 out of 5 shows that there exists a very high degree of satisfaction, i.e., 76.8% in general. The newer version of health insurance namely CMCHIS was found comparatively more promising with a higher satisfaction mean score of 3.88 than that of CMKHIS i.e., 3.79.

2. RELATIONSHIP ANALYSIS BETWEEN THE LEVEL OF AWARENESS AND OVERALL SATISFACTION

H_0: There is no correlation between the overall satisfaction and awareness of the respondents of CMCHIS/CMKHIS

H_1: There is a significant correlation between the overall satisfaction and awareness of the respondents of CMCHIS/CMKHIS

The relationships between the overall Satisfaction (dependent variable) and the ten awareness variables: (1) Period of insurance, (2) Amount of insurance at credit, (3) Amount of insurance totally for 4 years, (4) coverage to family members (5) Eligibility conditions of the insurance (6) Empanelled hospitals in your area (7) Formalities to be fulfilled at the time of approaching for treatment (8) Types of disease covered and treatments given (9) Types of diagnostic procedures covered and (10) Types of follow up procedures covered, are analysed with the help of correlation. The results of the correlation analysis of the research variables are listed in the Correlation table, and the hypothesis is tested with this analysis.

Table – 2 The correlation between the Awareness about and overall satisfaction in Chief Minister's Health Insurance Schemes for Poor

Awareness Variables		1	2	3	4	5	6	7	8	9	10
Overall satisfaction	P. Correlation	-.075	.003	.032	-.044	-.002	.051	.068	.136*	-.057	.001
	Sig. (2-tailed)	.195	.956	.577	.444	.975	.375	.244	.018	.327	.990
	N	300	300	300	300	300	300	300	300	300	300

*Correlation is significant at the 0.05 level (2-tailed).

Source: Output generated from SPSS 19

As the correlation coefficients are negative, there is a negative relationship between the overall satisfaction and the four awareness elements namely the period of insurance, the coverage to family members, eligibility conditions of the insurance and types of diagnostic procedures covered. This means that the null hypotheses are accepted regarding these elements. But these are not significant enough as the p values are more than 0.05 in all these aspects.

As the correlation coefficients are positive, there is a positive linear relationship existing between the overall satisfaction and the rest six awareness variables namely Amount of insurance at credit, Amount of insurance totally for 4 years, Empanelled hospitals in nearby area, Formalities to be fulfilled at the time of approaching for treatment, Types of disease covered and treatments given and Types of follow up procedures covered. This means that the null hypotheses are rejected regarding these elements. But again these are not significant

enough as the p values are more than 0.05 in all these aspects barring the awareness of Types of disease covered and treatments given.

To sum it up, except the awareness of the types of diseases covered and the treatments given, no other awareness factors affect the satisfaction of the beneficiaries significantly. In other words, their satisfaction is mainly based on their experience not on their mere awareness.

3. FACTOR ANALYSIS FOR BENEFICIARIES' SATISFACTION TOWARDS CMKHIS/CMCHIS

The High value of KMO obtained (0.852 > .05) indicates that a factor analysis is useful for the present data. The significant value for Bartlett's test of Sphericity is 0.000 and is less than .05 which indicates that there exists significant relationships among the variables. The resultant values of KMO test and Bartlett's test indicate that the present data is useful for factor analysis.

Table – 3 Total variance explained for the level of satisfaction of beneficiaries towards CMKHIS/ CMCHIS

Component	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	5.975	42.677	42.677	5.975	42.677	42.677	4.029	28.780	28.780
2	1.677	11.982	54.658	1.677	11.982	54.658	2.611	18.653	47.433
3	1.429	10.210	64.868	1.429	10.210	64.868	2.441	17.435	64.868
4	.923	6.595	71.463						
5	.772	5.512	76.975						
6	.665	4.749	81.723						
7	.514	3.670	85.393						
8	.459	3.280	88.673						
9	.369	2.634	91.308						
10	.311	2.221	93.529						
11	.288	2.056	95.584						
12	.246	1.759	97.343						
13	.215	1.537	98.880						
14	.157	1.120	100.000						

Extraction Method: Principal Component Analysis.

Source: Output Generated From SPSS 19

Eigen Value represents the total variance explained by each factor. Percentage of the total variance attributed to each factor. One of the popular methods used in Exploratory Factor Analysis is Principal Component Analysis, Where the total variance in the data is considered to determine the minimum number of factors that will account for maximum variance of data. The next step in the process is to decide about the number of factors to be derived. The rule of thumb is applied to choose the number of factors for which 'Eigen values' with greater than unity is taken by using Principal Component Analysis method. The Component matrix so formed is further rotated orthogonally using Varimax rotation algorithm which is the standard rotation method. All the statements are loaded on the three factors.

Table – 4 Rotated component matrix for level of satisfaction of beneficiaries towards CMKHIS/ CMCHIS

Factors	Component		
	1	2	3
Terms and conditions of the scheme	.637	.275	.244
Quality of treatment	.608	.148	.021
Kindness of the doctors	.678	.292	.111
Behaviour of the hospital staff	**.776**	.182	.059
Quality of medicine	.668	.087	.262
Medical Testing procedure	.712	.047	.110
Comfort in the room	.233	.188	.772
Infrastructure of the hospital	.112	.068	**.908**
Environment of the hospital	.190	.105	.835
Speed of processing the application at the time of registration	.244	.861	.170
Speed of processing the application at the time of applying for benefits	.210	**.885**	.157
Support of the government/liason officer	.658	.298	.272
Post-operative care	.723	.225	.187
Discharge procedures	.276	.819	.055

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 5 iterations.

Source: Output Generated From SPSS 19

The dimension of 'level of satisfaction of beneficiaries' comprises fourteen statements. Out of the 14 statements, 3 statements contribute more towards level of satisfaction. The statements are (1) Infrastructure of the hospital, (2) Speed of processing the application at the time of applying for benefits, and (3) Behaviour of the hospital staff. Based on the Eigen values, the 3 statements accounted for 64.868 percent of the variance in the original 14 statements. The remaining 11 statements contribute minimum towards the level of satisfaction (i.e.,) 35.132 percent of the variance.

CONCLUSION

The above analysis reveals that the beneficiaries are very much satisfied with the Government Sponsored Health Insurance Schemes, especially with the present version CMCHIS. Though making awareness is a predominant element for success of any programme, the present study nullifies it as the satisfaction is mainly based on the experience of the beneficiaries not on their mere awareness about various features. Similarly, the hospital infrastructure, claim processing and hospital staff behavior are found as the key determinants of overall satisfaction. And so, due care to these factors will enhance the satisfaction of the beneficiaries in future.

REFERENCES

1. Aggarwal, Aradhna. 2010. "Impact Evaluation of India's 'Yeshasvini' Community- Based Health Insurance Programme." Health Economics 19 (May): 5–35.

2. Arora,Dinesh, and Lipika Nanada. 2011."Towards Alternative Health Financing: the Experience of RSBY in Kerala." In India's Health Insurance Scheme for the Poor: Evidence from the Early Experience of the Rashtriya Swasthya Bima Yojana, ed. Robert Palacios, Jishnu Das, and Chagqing Sun, 189–214. New Delhi, India: Centre for Policy Research.

3. Dash,U.,and V.R.Muraleedharan. 2011. "How Equitable Is Employees' State Insurance Scheme in India? A Case Study of Tamil Nadu." Working Paper, Consortium for Research on Equitable Health Systems, Department of Humanities and Social Sciences, Indian Institute of Technology, Chennai, India.

4. Gerard La Forgia and Somil Nagpal, 2012 Government-Sponsored Health Insurance in India Are You Covered? Directions in Development. Washington, DC: World Bank.

5. Grover, Seema, and Robert Palacios. 2011. "The First Two Years of RSBY in Delhi." In India's Health Insurance Scheme for the Poor: Evidence from the Early Experience of the Rashtriya Swasthya Bima Yojana, ed. Robert Palacios, Jishnu Das, and Chagqing Sun, 153–188. New Delhi, India: Centre for Policy Research.

6. Johnson, Doug, and Sushil Kumar. 2011. "Do Health Camps Make People Healthier?: Evidence from an RCT of Health Camps on Usage of RSBY." Social Science Research Network (June): 1–18.

7. Kuruvilla, Sarosh, and Mingwei Liu. 2007. "Health Security of Rural Poor? A Case Study of a Health Insurance Scheme for Rural Farmers and Peasants in India." International Social Security Review 60 (4): 3–21.

8. Palacios, Robert. 2011. "A New Approach to Providing Health Insurance to the Poor in India: The Early Experience of Rashtriya Swasthya Bima Yojana." In India's Health Insurance Scheme for the Poor: Evidence from the Early Experience of the Rashtriya Swasthya Bima Yojana, ed. Robert Palacios, Jishnu Das, and Chagqing Sun, 1–37. New Delhi, India: Centre for Policy Research.

9. Pugazhenthi.V and Sunitha. C., An Analysis of Awareness about the Features of Chief Minister's Comprehensive Health Insurance Schemes of Government of Tamil Nadu, Intercontinental Journal Of Marketing Research Review,Vol.2 , Issue 4,April 2014, pp1-17.

10. Rao, M., and S. Kadam. 2009. A Rapid Evaluation of the Rajiv Aarogyasri Community Health Insurance Scheme, Andhra Pradesh. Hyderabad, India: Indian Institute of Public Health.

11. Reddy, Rahul K. 2011. Health Needs of North Coastal Prakasam Region, Andhra Pradesh, India. Hyderabad, India:Access Health International and Nimmagadda Foundation.

12. Sun, Changqing. 2011. "An Analysis of RSBY Enrolment Patterns: Preliminary Evidence and Lessons from the Early Experience." In India's Health Insurance Scheme for the Poor: Evidence from the Early Experience of the Rashtriya Swasthya Bima Yojana, ed. Robert Palacios, Jishnu Das, and Chagqing Sun, 84–116. New Delhi, India: Centre for Policy Research.