

Cindhiya^{*}
Dr. Rajalakshmi Vel^{**}

An Empirical Study of Health Insurance Literacy and Willingness to Pay

Most emerging economies have made universal health coverage their national policy priority (Prinja et al., 2019). As per the Forbes India Report (2021), only 37% of the population are however covered under either the government or private health insurance schemes, which is far from satisfactory for India. Though Covid-19 has propelled health insurance coverage, considering the rising healthcare costs, buying health insurance is a necessity for every individual. Against the above background, the current study examines the perception, awareness and knowledge, especially among the earning-class towards health insurance after the pandemic. It investigates the insured individuals' knowledge, specifically about the policy benefits and claims procedure in Tamil Nadu. Further, the study covers the buying behavior of uninsured individuals. This survey, through a structured questionnaire, was carried out among both the insured and uninsured, with a sample size of 400 participants in Tamil Nadu. The responses rate was 97.75%.

The results of the study reveal that the perception of respondents about health insurance has changed post-pandemic as 66% of them considered it important, and, felt secured once insured. There is only a moderate awareness about health insurance, policy claims' procedure and locations in Tamil Nadu. However, there exists health insurance awareness among the uninsured population, as they also exhibit willingness to purchase a policy, provided there is precise transparent

* Student - II MBA, Sri Ramachandra Institute of Higher Education and Research, Chennai
Email: cindhiyasimon@gmail.com

** Assistant Professor, Faculty of Management Sciences, Sri Ramachandra Institute of Higher Education and Research, Chennai. Email: drrajalakshmivel@sriramachandra.edu.in

information on policy benefits and ease of claims' settlements. This aspect of insurance is an important take away for insurance providers as well as policy framers to accordingly create mass awareness and educate the people about health insurance.

Keywords: Health insurance – Earning class – Policy benefits and claims Perception Knowledge – Awareness

Background

Health insurance literacy in the Indian context refers to an individual's or community's understanding of health insurance policies, their benefits, terms and conditions, and how to effectively utilize them to access healthcare services. It encompasses the knowledge and awareness needed to make informed decisions about selecting, purchasing, and using health insurance coverage. In India, health insurance literacy is particularly important due to the diverse and complex healthcare scenario and socio-geographical conditions. India has a mix of public and private healthcare providers, and, various insurance products are available from different companies. Many people are unaware of the details of the availability of health insurance plans, or they may not fully comprehend how to maximize its benefits. Some of the key aspects of health insurance literacy in the Indian context include understanding the terms and conditions of the health insurance policies, including coverage limits, waiting periods, co-payments, and exclusions, knowledge about the method to seek pre-authorization for planned medical procedures and such nuances. In reality, health insurance literacy is far from satisfactory at every social stratum. In a study that examined the influence of insurance literacy on owing even the simplest and micro-insurance policy indicates that insurance literacy level is at 36.75% in NCR region (Uddin, 2017). As per the fifth National Family Health Survey, less than 50% the households have only one member who has availed health scheme (Nankani, 2022).

Studies on health insurance literacy report that majority of the population are aware of health insurance though they have not subscribed to it (Netra & Rao, 2019). Even among patients with critical illnesses, the awareness is found to be around 41% only (Krishnan *et al.*, 2021). However, knowledge about health insurance is found to be meagre particularly among the rural as well as semi-urban population (Raja *et al.*, 2019). The major reason for

the low health insurance awareness is due to factors, like low level of education, unskilled or semi-skilled work situation among the rural folk and lack of knowledge (Aslam *et al.* 2023). Even the insured individuals have reported that they had no clear and exact information about the benefits and limitations of their policies they have subscribed to (Aslam *et al.* 2023). They are also unaware of the various beneficial aspects of their own policies, such as tax benefits, risk coverage and security with high return (Sini & Karpagam, 2016). In a study that examined the willingness of the uninsured population, 71% were willing to pay for health insurance (Khatiwada *et al.*, 2017). The main reasons for unwillingness to buy health insurance are shortage of money (Khatiwada *et al.*, 2017), very high premium policy options, difficult to understand the fine-print policy implications and lack in trust in insurance companies (R *et al.*, 2019), limited policy clauses, availability of other avenues to invest (Bawa, S. K. & Ruchita, M. 2011) and finally the fatal feeling that 'there is no need for it' (Madhukumar, *et al.*, 2012). In spite of all the negatives, there exists a strong correlation between income levels, education and WTP that exhibit a strong desire to invest in health insurance (Ghosh, M. 2013). In fact, people were voicing the opinion, while exhibiting their willingness and awareness, that the government should come out with a clear-cut health- insurance policy structure (Reshmi, B. *et al.*, 2007). The expenditure for health is mainly an individual's out-of-pocket, showing that there is a gap between the awareness and utilization of health insurance in reality (Gowda *et al.*, 2015). It is evident from the literature review as well that there exists a gap between health insurance and literacy. While there is awareness and sound knowledge of health insurance policies, benefits and claim procedure are lacking among the insured. Decision to purchase health insurance is mainly due to the shallow knowledge of what constitutes health and not due to a lack complete understanding of health insurance.

With this introduction, the current study focuses on health insurance literacy per se, i. e. awareness, knowledge, perception and willingness among the earning-class individuals. It also focuses on health insurance policy provisions of public and private insurance providers but excludes government-run schemes. Using convenient sampling technique, responses were collected from 391 respondents across urban, semi-urban and rural areas of Tamil Nadu.

The study lists the following inclusion criteria for the sample selection.

1. Working/Earning individuals above 18 years of age. Earning class are those men and women who earn some form of income from various sources, that play a major role in their ability to purchase a health insurance policy. The earning class of the population possesses a better ability to afford health insurance. These eligible individuals have been identified as the population for the study (Ghosh, 2013; Kakar *et al.*, 2022).
2. The earning individual should be a primary health insurance policy holder.
3. An insured person is someone who does not possess any health insurance policy.

The responses data are analyzed using descriptive and inferential statistical tools, such as ANOVA, t-test, Exploratory Factor Analysis and Chi-square. In order to examine the health insurance literacy and willingness among the individuals to purchase a policy, the following hypotheses are framed as part of this study.

Insured

- H_01 - There is no significant association between nature of profession and awareness on tax benefits.
- H_02 - There is no significant association between income level and awareness on tax benefits.

Uninsured

- H_03 - There is no significant association between awareness and location.
- H_04 - There is no significant association between age and awareness.
- H_05 - There is no significant association between location and awareness of life and health insurance.
- H_06 - There is no significant association between Location and income towards out-of-pocket expenses
- H_07 - There is no significant association between Location and Willingness to buy
- H_08 - There is no significant association between Location and Willingness if government intervenes/mandates

- H_09 - There is no significant association between Location and Willingness on minimum premium levels.

To examine the people's perception on health insurance after the onset of the pandemic

- H_{010} - There is no significant association between impact of Covid and choosing a health insurance policy.

To study the knowledge of health insurance benefits and claims among insured individuals

- H_{011} - There is no significant association between the location and score.
- H_{012} - There is no significant difference in scores between Urban and Semi-Urban location.
- H_{013} - There is no significant difference in scores between Urban and Rural location.
- H_{014} - There is no significant difference in scores between Semi-Urban and Rural location.

Findings:

Table 1 : Demographic Details

<i>Demography</i>	<i>Insured</i>	<i>Uninsured</i>	<i>Total</i>
Gender			
Male	97	104	201
Female	68	122	190
Age (years)			
18-24	44	45	89
25-34	28	63	91
35-44	32	41	73
45-54	34	35	69
55-64	16	25	41
Above 64	11	17	28
Education			
No education	1	9	10

Primary school	1	25	26
Secondary school	12	42	54
Diploma	18	22	40
Under graduate	76	73	149
Postgraduate	57	55	112
Location			
Urban	68	51	119
Semi-urban	61	77	138
Rural	36	98	134
Total	165	226	391
Marital Status			
Single	56	62	118
Married	109	164	273
Occupation			
Government Service	41	22	63
Private Service	85	138	223
Self-employed	18	39	57
Retired	9	11	20
Other	12	16	28
Profession			
Agriculture	4	16	20
Business-self	15	23	38
Education	24	37	61
Engineer (non-IT)	19	17	36
Finance	15	6	21
Healthcare	44	47	91
IT	24	17	41
Law	5	2	7
Other	12	22	34
Rural Development	3	39	42
Income Range			
<10,000	12	77	89
10,001-30,000	59	92	151
30,001-50,000	38	29	67

50,001-70,000	23	15	38
>70,000	33	13	46
Family Structure			
Nuclear family	120	150	270
Joint family	45	76	121

The analysis reveals that more men than women are insured. Majority of the respondents are between 18 and 34 years of age; they are occupied in various professions. Urban and semi-urban men and women are insured more than those residing in rural areas. People employed in government services are more insured than employees of private establishments and self-employed. Professionals in healthcare and IT are more insured than any other profession. As the income level increases the proportion of the insured increases.

Table 2 : Awareness of the Insured

<i>Awareness</i>	<i>Yes</i>	<i>No</i>
1. Waiting period	78	87
2. No-claim benefit	54	111
3. Annual checkup once in a block of four claim-free years	65	100
4. Reimbursement procedures	111	54
5. Claim inclusion/exclusion criteria	46	119
6. IRDAI	53	112
7. Cashless process time	56	109
8. Tax benefits	135	30
9. Co-payment structure	32	133

Table 2 shows the insured respondents' "awareness" about the claims and benefits. Most of the respondents are aware of the reimbursement procedures and tax benefits; this is followed by awareness on waiting period, annual check-up in 4 claim-free years and IRDAI, and, then those with poor awareness on co-payment structure, claim inclusion and exclusion criteria.

Table 3 : Awareness of Uninsured

<i>Awareness</i>		<i>Urban</i>	<i>Semi-urban</i>	<i>Rural</i>	<i>Total N (%)</i>
Health insurance	Yes	46	68	67	181(80.1)
	No	5	9	31	45(19.9)
Difference between health and life insurance	Yes	43	67	69	179(79.2)
	No	8	10	29	47(20.3)

Nearly 80% of the uninsured respondents are aware of health insurance and only 20% are unaware. It is interesting to note that almost the same percent (79%) of the uninsured are aware of the differences between *life insurance* and *health insurance*.

Table 4 : HIL and Willingness among Insured and Uninsured

H₀		<i>Value</i>	<i>df</i>	<i>Significance/ Insignificance</i>	<i>Accepted/ Rejected</i>
H₀₁	Pearson chi-square	23.256	9	0.006	Rejected
	likelihood ratio	21.359	9	0.011	
H₀₂	Pearson chi-square	18.868	4	0.001	Rejected
	likelihood ratio	20.626	4	0.000	
	linear-by-linear association	14.813	1	0.000	
H₀₃	Pearson chi-square	14.975	2	0.001	Rejected
	likelihood ratio	15.049	2	0.001	
	linear-by-linear association	12.419	1	0.000	
H₀₄	Pearson chi-square	24.515	5	0.000	Rejected
	likelihood ratio	22.32	5	0.000	
	linear-by-linear association	10.881	1	0.001	
H₀₅	Pearson chi-square	8.262	2	0.016	Rejected
	likelihood ratio	8.263	2	0.016	
	linear-by-linear association	5.471	1	0.019	

H₀₆	Pearson chi-square	16.728	8	0.033	Rejected
	likelihood ratio	16.597	8	0.035	
	linear-by-linear association	0.103	1	0.748	
H₀₇	Pearson chi-square	23.867	8	0.002	Rejected
	likelihood ratio	23.608	8	0.003	
	linear-by-linear association	11.855	1	0.001	
H₀₈	Pearson chi-square	21.382	8	0.006	Rejected
	likelihood ratio	21.24	8	0.007	
	linear-by-linear association	9.691	1	0.002	
H₀₉	Pearson chi-square	4.883	4	0.300	Accepted
	likelihood ratio	5.018	4	0.285	
	linear-by-linear association	0.773	1	0.379	

Table 4 presents the Chi-square results of listed variables' association with the corresponding dependent variables. The results show that:

- There is significant association between the respective listed variables, except for the Hypothesis 9.
- Thus, H₀₁, H₀₂ are rejected proving there is significant association between nature of profession and awareness on tax benefits, between income level and awareness on tax benefits for the insured respondents.
- With regard to the uninsured population, H₀₃ H₀₄, H₀₅, H₀₆, H₀₇ and H₀₈ are rejected, substantiating the significant association between (i) awareness and location, (ii) age and awareness, (iii) location and awareness of life and health insurance, (iv) location and income towards OOP expenses, (v) location and willingness for future purchase, (vi) location and willingness on government intervention.

Most of the respondents have indicated that they will get enrolled in a health insurance if government makes it mandatory despite the disadvantage of location. This shows that

willingness is influenced by the government's interventions on the enrollment, and, then attitude of individual can be influenced. But there is no significant association between location and willingness on minimum premium levels as H09 is accepted. Those who are willing to purchase the health insurance policy did not opt for the willingness to choose a policy with minimum premium levels. This shows that people are willing to buy a health insurance policy with higher level premium offering better benefits rather choosing one with lesser benefits.

Table 5 : Impact of Covid on Health Insurance

Cross Tabulation

		How did you choose health insurance policy?				Total
		Myself	Friends and Family	Insurance Agent/s	Employer	
When did you take health insurance policy ?	Pre-Covid	15	16	6	57	94
	Post-Covid	10	9	15	37	71
Total		25	25	21	94	165

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.022 ^a	3	.046
Likelihood Ratio	8.050	3	.045
Linear-by-Linear Association	.001	1	.981
N of Valid Cases	165		

Table 5 indicates that the p-value being <0.05, H0 is rejected. Thus, there is a significant association between impact of covid and choosing a health insurance policy.

Table 6 : Knowledge of Insured about Policy Benefits

Coverage of Medical Expenses	<i>Can be covered</i>	<i>Can't be covered</i>	<i>Don't know</i>
1. Room and nursing expenses	134	11	20
2. Admission primarily for diagnostic/ evaluation	42	69	54
3. Ambulance expenses	29	71	65
4. Hospital registration charges, admission charges	48	71	46
5. Intentional self-injury/breach of law-criminal intent	19	105	41
6. Untested and experimental therapies	15	93	57
7. OT, ICU charges	133	12	20
8. Non-medical expenses	33	87	45
9. Domiciliary hospitalization	50	59	56
10. All-day care-treatments	103	32	30

Table 6 shows the insured individuals' knowledge of the policy benefits. The majority of the respondents answered correctly on the coverage of room and nursing expenses, intentional self-injury, OT and ICU charges, yet un-tested experiments and all-day care treatments. Most of them are unsure of the coverage on ambulance expenses, admission primarily for diagnostic purposes and domiciliary hospitalization.

Table 7 : Scores of Knowledge about Policy Benefits of Insured

	No.	<i>Frequency</i>	<i>Percent</i>	<i>Cumulative Percent</i>
Valid	0	11	6.7	6.7
	1	3	1.8	8.5
	2	11	6.7	15.2
	3	8	4.8	20.0
	4	19	11.5	31.5
	5	30	18.2	49.7
	6	27	16.4	66.1
	7	29	17.6	83.6
	8	14	8.5	92.1
	9	9	5.5	97.6
	10	4	2.4	100.0
	Total	165	100.0	

Majority of the respondents have scored between 5 to 7 points; 11 respondents have scored 0, revealing that they have no idea on the coverage of the medical expenses. Only 4 among 165 respondents have scored 10. Overall, this depicts the poor knowledge of insured regarding the coverage of medical expenses, which is a part of the policy benefits.

Table 8: Effect of Location on Scores for Knowledge on Policy Benefits

<i>One-Sample Test</i>						
	Test Value = 10					
	<i>t</i>	<i>df</i>	<i>Sig.</i> (2-tailed)	<i>Mean Difference</i>	<i>95% Confidence Interval of the Difference</i>	
					<i>Lower</i>	<i>Upper</i>
Score	-24.846	164	.000	-4.709	-5.08	-4.33

As the p-value is $1.774E-57 < 0.05$, showing the significant association between location and score, the H_0 is rejected.

Table 9: ANOVA - Multiple Comparison of Location with Score

Multiple Comparisons						
Dependent Variable : Score						
LSD						
<i>(I) Location</i>	<i>(J) Location</i>	<i>Mean Difference (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>	<i>95% Confidence Interval</i>	
					<i>Lower Bound</i>	<i>Upper Bound</i>
Urban	Semi-urban	-1.068*	.422	.012	-1.90	-.23
	Rural	-.062	.494	.900	-1.04	.91
Semi-Urban	Urban	1.068*	.422	.012	.23	1.90
	Rural	1.006*	.504	.047	.01	2.00
Rural	Urban	.062	.494	.900	-.91	1.04
	Semi-urban	-1.006*	.504	.047	-2.00	-.01

*. The mean difference is significant at the 0.05 level.

- *Urban vs Semi-Urban:* p-value is $0.012 < 0.05$. i. e., H_0 is rejected, stating there is significant differences in scores between urban and semi-urban locations.

- Urban vs Rural: p-value is $0.900 > 0.05$. H_0 is accepted, stating there are no significant differences in scores between urban and rural locations.
- *Semi-Urban vs Rural*: p-value is $0.047 > 0.05$. H_0 is rejected, stating there are significant differences in scores between semi-urban and rural locations.

Table 10 : Results of Willingness among Uninsured

<i>Willingness</i>	<i>Definitely not</i>	<i>Probably not</i>	<i>Neutral</i>	<i>Probably</i>	<i>Definitely</i>
Future purchase	43	23	33	89	38
Government mandate	27	19	24	64	92

From Table 10, it is evident that most of the respondents showed a positive response on their willingness to purchase a health insurance policy. This also depicts the individuals' attitude. i.e., the respondent's willingness towards health insurance shifts from probably to definite purchase, if the government mandates it. There are many reasons for not subscribing to health insurance. Some barriers that influence the buying behavior are taken from review of similar studies by Madhukumar, et al. (2012) Aslam et al. (2023), Krishnan et al. (2021). All the factors were taken from the form of variables indicated by the respondents who were asked to give their responses in a close-ended manner. Thereafter, factor analysis was run to narrow down these variables.

Table 11: List of Variables

<i>Variables</i>	<i>Description</i>
V1	Poor knowledge on health insurance
V2	Depend on primary insurance holder (Part of floater policy)
V3	Cannot afford to pay premium
V4	No trust on health insurance companies/agents/structure
V5	Other investment avenues
V6	Formalities and processes are tedious
V7	Don't need health insurance (I have money to handle)
V8	No returns (no money back policy)
V9	I'm not interested
V10	I have many things to handle; not in a position to invest in insurance policy

The variables were analysed using KMO test; the measure of sampling adequacy is found to be 0.686. Thus, it indicates that the sample is fit for testing. The overall significance of correlation matrices has been tested (Bartlett's test- approx. chi-square- at 294.983 and significance at 1.8386E-38) at degree of freedom-45), which provided validity for factor analysis.

Table 12: Total Variance Explained

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	2.457	24.574	24.574	2.457	24.574	24.574	2.092	20.915	20.915
2	1.631	16.307	40.880	1.631	16.307	40.880	1.681	16.805	37.720
3	1.098	10.981	51.862	1.098	10.981	51.862	1.414	14.141	51.862
4	.954	9.541	61.402						
5	.801	8.012	69.415						
6	.778	7.778	77.193						
7	.688	6.883	84.076						
8	.618	6.183	90.259						
9	.520	5.198	95.457						
10	.454	4.543	100.000						

Extraction Method : Principal Component Analysis.

Eigen Value

All the listed factors, being uninsured, were analysed using factor analysis which showed that there are 3 key factors, and the rest were ignored. It is observed from Table 8 that only 3 factors have an Eigen value of more than one. Accordingly, the components explained by 1, 2 and 3 showed: 20.915, 16.805 and 14.141 percent of variance respectively, while the cumulative variance explained by these factors is : 51.862%. The rest are considered beyond the scope of this study

Table 13 : Rotated Component Matrix

Rotated Component Matrix ^a	Component		
	1	2	3
Poor knowledge on health insurance	-.703		
No returns (No money back policy)	.672		
No trust on Health insurance companies/agents/structure	.643		
Don't need health insurance (I have money to handle)			
I have many things to handle, not in the position to invest in an insurance policy.		.759	
Cannot afford to pay premium		.753	
Formalities and processes are huge		.545	
Other investment avenues			.811
Depend on primary insurance holder (Part of floater policy)			.555
I'm not interested			.505
Extraction Method : Principal Component Analysis. Rotation Method : Varimax with Kaiser Normalization. a. Rotation converged in 5 iterations.			

Table 13 shows that each statement is correlated with the corresponding factor loading. Higher is the factor loading, stronger is the correlation between the factor and the statement. On this basis, only variable 1 has negative loading. i. e., poor knowledge on health insurance has strong negative correlation with the buying behavior. Other variables have positive correlation. Out of 10, the factor, “Don't need health insurance (I have money to handle)” didn't impact the buying behavior as it did not have any loading.

Table 14 : Major Factors and Variances

Factor	% of Variance	Factor Interpretation	Variables included in the factor	Loading
F1	20.91%	Mindset	Poor knowledge on health insurance (V1)	-0.703
			No returns (not money back policy) (V8)	0.672
			No trust on health insurance companies/ /agents/structure (V4)	0.643

F2	16.80%	Financial constraints & affordability	I have many things to handle; not in a position to invest in an insurance policy (V10)	0.759
			Cannot afford to pay premium (V3)	0.753
			Formalities and processes are tedious (V6)	0.545
F3	14.14%	Preferences	Other investment avenues (V5)	0.811
			Depend on primary insurance holder (Part of floater policy) (V2)	0.555
			I'm not interested (V9)	0.505

The above-tabulated factors are in the degree of variance, i.e., importance. Factor 1 has 20.91% followed by Factors 2 and 3 with 16.80% and 14.14% respectively. Thus, it is found that major factors for being uninsured impact the buying behavior of individuals.

Discussion

This study on health insurance literacy indicates the willingness among the individuals to purchase health insurance and provides insights on the awareness levels of individuals from different locations of the states. That health insurance is not a new-found knowledge among the people, and, the fact that common awareness is comparatively higher, tally with similar studies conducted by Reshmi *et al.* (64%) and Jangati *et al.* (33.5%). Also, the awareness on policy claims and benefits, which should per force be possessed by the insured individuals, is satisfactory among the individuals who have had earlier experience of submitting past claims. In this study, the uninsured people exhibited an increased awareness (80.1%) of health insurance, which is similar to 81% claimed Gowda *et al.* (2015) due to the central and state health insurance schemes, as stated by V. R. Uma and K. Jayakumar (2015).

The study reveals that the experience and severity of the covid pandemic have had a direct influence on people's decisions regarding health insurance enrollment and that anxiety may have served as a catalyst for greater interest in obtaining health coverage. While analysing the importance of health insurance, it is realized that 66% of the respondents perceived health insurance as important, which is lesser than the 99% claimed by Shrestha *et al.* (2020). On the contrary, people who considered health insurance as not important indicate their poor willingness towards health insurance.

Furthermore, the study, while delving into the reasons why some individuals who remained uninsured, explores their perceptions and willingness with the experience of the pandemic eager to acquire health insurance policy. By identifying these factors, this research offers valuable insights to regulatory bodies and insurance providers, enabling them to implement structural changes that promote increased awareness and understanding of health insurance policies and their associated benefits.

Implications of the Study

The study has focused on profiling both the health insurance policyholders as well as non-policyholders in terms of their outlook, and familiarity about the intricacies of health insurance. Such data is crucial for health insurance providers in manifold ways. It helps them:

- (a) to structure and formulate the policy products accurately and intelligently and with clarity,
- (b) to train agents and educate clients on policy clauses, their benefits which can reduce information asymmetry, and, thereby
- (c) to lower claim rejections as well.

Moreover, well-informed clients enhance the trust factor in a competitive insurance landscape and help in word-of-mouth publicity and goodwill for health insurance providers.

The government's policy aim of financial inclusion is achieved by enhancing the literacy levels of the existing and prospective policy holders. As policy makers are striving to promote health insurance, carrying out a mapping of health insurance policyholders provides useful real-time data on health insurance literacy levels and the concerns of non-policy holders to motivate them to eventually purchasing policies. Such data is also useful for hospitals that can help provide clarity of coverage and make verification process less burdensome for insured patients, enhancing patient satisfaction towards health insurance. As individuals and families feel the burden of rising medical expenses, health insurance literacy is crucial to understand healthcare billing system by hospitals and polyclinics. Further, this research forms an essential base for future researchers to study

in-depth the health insurance literacy parameters for building a sustainable healthcare system for the Indian population.

References

1. Jacob, Anjali (2018), A study on customer perception towards health insurance in Ranny Thaluk, *International Journal of Advance Research and Development*, Vol. 3, Issue 12, pp. 41-48.
2. Aslam, M., Hafiz, B., Soomro, S. P., Dawood, H. M., Bhatti, A. K. & Farhana (2023), Health insurance coverage and its determinants among middle-income households urban areas, Pakistan *Journal of Medical and Health Sciences*, 17(3), pp. 334-36.
3. Bansal, A., Goel, S., Singh, A. K., Singh, A. K., Goel, A. B., Naik, S. M., Chhoker, V. K. & Goel, S. (2015), A community-based study to assess the awareness of health insurance among rural northern Indian population, *International Journal of Health System and Disaster Management*.
4. G, N. (2019), *A Study on awareness, coverage and willingness to avail health insurance among the residents of a rural area in central Karnataka*. <http://njcmindia.com/index.php/file/article/view/483>
5. Gajula, S. & Dhanavanthan, P. (2020), Consumer's perception and factors influencing selection of health insurance policy in Hyderabad region, *AIP Conference Proceedings*, American Institute of Physics.
6. Ghaddar, S., Byun, J. & Krishnaswami, J. (2018), Health insurance literacy and awareness of the affordable care act in a vulnerable Hispanic population *Patient Education and Counseling*, 101(12), 2233-40.
7. Gowda, S., Manjunath, C. & Krishna, D. V. (2015), Awareness about health insurance in rural population of south India. *International Journal of Community Medicine and Public Health*.
8. Hadaye, R. S. & Thampi, J. G. (2018) Catastrophic health-care expenditure and willingness to pay for health insurance in a metropolitan city: A cross-sectional study *Indian Journal of Community Medicine*, 43(4), 307-11.

9. Harish, R., Suresh, R. S., Rameesa, S., Laiveishiwo, P. M., Loktongbam, P. S., Prajitha, K. C. & Valampampil, M. J. (2020), Health insurance coverage and its impact on out-of-pocket expenditures at a public sector hospital in Kerala, India, *Journal of Family Medicine and Primary Care*.
10. Kakar, R., Combs, R., Young, M. H., Ali, N. & Muvuka, B. (2022), Health insurance literacy perceptions and the needs of a working-class community, *Health Literacy Research and Practice*, 6(2).
11. Khatiwada, B., Ghimire, S., Shrestha, N., Shrestha, K. M. & Dahal, P. K. (2017), Willingness to pay for health insurance in Mangalbare village development committee of Illam district, *MOJ Public Health*, 5(2).
12. Krishnan, A., Pillai, J. S. K. & Mondal, R. (2021), Awareness of health insurance policies among cardiac patients visiting a tertiary care cardiac hospital in south India, *International Journal of Community Medicine and Public Health*, 8(5), 2455.
13. Madhukumar, S., D, S. & Gaikwad, V. (2012), Awareness and perception regarding health insurance in Bangalore rural population *International Journal of Medicine and Public Health*, 2(2), 18-22.
14. Pillai, G., Sudarsanan, S., Anil, A. & Mir, A. (2022), A study to assess the perception, utilization and patient satisfaction regarding community health insurance schemes in a selected population, *International Journal of Early Childhood, Special Education*, 14(7).
15. R, S., M, A., S, M., R, S., S, K., & Srikanth, S. (2019), Awareness on health insurance among a selected urban population in Puducherry, *National Journal of Research in Community Medicine*, 8(2), 176.
16. Raja, T. K., Kumar, M. B., Muthukumar, T. & Mohan, A. (2019), Awareness and perception of health insurance among rural population in Kancheepuram district, Tamil Nadu. *International Journal of Community Medicine and Public Health*.
17. Ramegowda, C. & Shivalingaiah, A. H. (2015), Awareness and utilization of health insurance services by the families residing at urban field practice area of a medical college in Bangalore, *National Journal of Community Medicine*, 6(01), 69-72.

18. Reshmi, B., Nair, N. S., Sabu, K. M. & Unnikrishnan, B. (2007), Awareness of health insurance in a south Indian population : A community-based study. *Health Population Perspective Issues*, 30(3), 177-88.
19. Reshmi, B., Unnikrishnan, B., Parsekar, S. S., Rajwar, E., Vijayamma, R. & Venkatesh, B. T. (2021), Health insurance awareness and its uptake in India : A systematic review protocol. *BMJ Open*, 11(4), e043122.
20. Seddoh, A. T. & Sataru, F. (2018), Mundane? demographic characteristics as predictors of enrolment onto the national health insurance scheme in two districts of Ghana. *BMC Health Services Research*, 18(1).
21. Setswe, G., Muyanga, S., Witthuhn, J. & Nyasulu, P. (2015) Public awareness and knowledge of the national health insurance in South Africa. *The Pan African Medical Journal*, 22.
22. Sharma, D., Basnet, P. & Kafle, R. (2021), Awareness, enrollment and utilization of health insurance among adults of Pokhara, *Journal of College of Medical Science Nepal*, 17(2), 109-16.
23. Shrestha, M. V., Manandhar, N., Dhimal, M. & Joshi, S. C. (2020), Awareness on social health insurance scheme among locals in Bhaktapur municipality. *Journal of Nepal Health Research Council*, 18(3), 422-25.
24. Sini, V. & Karpagam, C. R. (2016), A study on policy holders awareness and preference towards health insurance, *International Journal of Scientific Research and Modern Education (IJSRME)*, 1(II), 23-28.

