

## **Research paper on Health expenditure spent by households during COVID-19 pandemic**

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### **Abstract**

**The spending on health has phenomenally changed based on their age group by households during the corona pandemic. COVID-19 pandemic has made certain group of people to spend more on health for various reasons ranging from lack of public transport, closure of government hospitals, many people were feared to visit government hospitals, government hospital converted into corona zones, patients with other disease were neglected and free meds gave in government medical clinics were not available. This study enlightens the changes made on health expenditure by households during the coronavirus pandemic and to understand the awareness about health insurances among people.**

Key words: COVID-19, Health Expenses, Health Insurance

### **I INTRODUCTION**

The coronavirus outbreak became exposed on December 31, 2019 when China informed the World Health Organization regarding a group of instances of pneumonia of an unknown disease in Wuhan City in Hubei Province. Gradually the disease spread too many places in China, and subsequently to the rest of the world. The WHO has announced it a pandemic. The infection has been named SARS-CoV-2 and the ailment is presently called COVID-19 (Corona Virus).

Most people infected with COVID-19 infection will encounter mild to moderate respiratory disease and recover without requiring special treatment. Aged people and those with basic clinical issues like cardiovascular ailment, diabetes, chronic respiratory ailment, and cancer are bound to create serious illness. This disease spreads very fastly.

The Indian economy has been encountering critical log jam during the past quarters. In the third quarter of the current monetary, the economy developed at a six-year low pace of 4.7%. Investment and consumption requests had been grieving and various boost measures have been taken to bring back the economy on a development way. There was a strong hope of recovery in the last quarter of the current financial. However, the new coronavirus epidemic has made the recovery extremely difficult. The outbreak has given rise to new difficulties for the Indian economy presently, causing extreme problematic effect on both demand and supply components which can possibly crash Indian economy

The outbreak of corona virus pandemic is unexpected shock to Indian economy. It has changed every aspects in the lives of people. With prolonged country wise lockdown and worldwide financial downturn has made people less inclined to spend due to less or no income. Consumption is highly affected because of job losses and decrease in pay levels of individuals especially the daily breadwinners because of slowing activity of retail sectors, construction, entertainment, etc. With widespread fear and panic now increasing among people, overall confidence level of consumers has dropped significantly, leading to postponement of their purchasing decisions.

Currently the impact of corona virus in everyday life are broad and have extensive outcomes. The impact on health care among individuals are listed below

### **Lack of medicines**

Patients who purchase medicines from government hospitals were forced to purchase expensive medicines from private medical store due to inadequacy of medicines at government hospitals. Lockdown has disrupted the supply chain due to which sufficient medicines were not provided in government hospitals.

### **Patients with other health issues were neglected**

Many hospitals treated only corona patients and because of which these hospitals were considered as corona wards. Due to this patients with other health ailments were are not treated. Many government hospitals were shut down due to the spread. And also many private hospital were reluctant in providing medication to the patients.

### **Lack of accessibility**

Patients were not able to reach out hospitals due to lack of public transport. And this forced people to either visit private hospitals or to take private transportation this added burden to the individuals because only few could afford private transports because of downfall of income or no income.

## **II RESEARCH METHODOLOGY**

- **Nature of Data used:** A well- structured questionnaire with closed ended questions was used to collect data from the respondents.
- **Secondary Data:** The secondary data for the study has been drawn from books, journals, internet etc.
- **Sampling Design:** This study has been carried out on households from different area across Tamil Nadu, above the age group of 24 consisting of various demographic background. The respondents in this study are breadwinners of their family. Since, it was a period of lockdown, the Google forms questionnaire was circulated online through whatsapp and data were collected and recorded. The responses are self reported

andvoluntary in nature. Among 205 responses 3 submitted responses were discarded as it was repeated by the same person. Thus, total of 202 were included in the study. Of the studied samples 52.5 % were male and 47.5% were females sample strategy- convenience sampling was adopted to get prompt responses.

### Statistical analysis

The SPSS was used for the statistical analysis of the data collected. The demographic variables, state of expenditure, nature of medicine undertaken and awareness about health insurance are presented through the frequency tables. The relationship and association are studied by using the descriptive statistics. Karl Pearson's chi-square test was used with state of expenditure and age group.

## III DATA ANALYSIS

**Table-1: Demographic variable**

Variable	24-44		45-64		65 & above		Total	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
<b>Gender</b>								
<b>Male</b>	49	24.3	35	17.3	22	10.9	106	<b>52.5</b>
<b>Female</b>	48	23.8	28	13.9	20	9.9	96	<b>47.5</b>
<b>Total</b>	<b>97</b>		<b>63</b>		<b>42</b>		<b>202</b>	
<b>Locality</b>								
<b>Rural</b>	19	9.4	18	8.9	13	6.4	50	<b>24.8</b>
<b>Semi-Urban</b>	23	11.4	21	10.4	12	5.9	56	<b>27.7</b>
<b>Urban</b>	55	27.2	24	11.9	17	8.4	96	<b>47.5</b>
<b>Total</b>	<b>97</b>		<b>63</b>		<b>42</b>		<b>202</b>	
<b>Health issues</b>								
<b>No</b>	83	41.1	24	11.9	9	4.5	116	<b>57.4</b>
<b>Yes</b>	14	6.9	39	19.3	33	16.3	86	<b>42.6</b>
<b>Total</b>	<b>97</b>		<b>63</b>		<b>42</b>		<b>202</b>	

Source: Primary data

**Table-2: Health ailments faced during pandemic**

Health issues	Male		Female		Total	
	Frequency	%	Frequency	%	Frequency	%
<b>No</b>	61	30.2	55	52.5	116	<b>57.4</b>
<b>Yes</b>	45	22.3	41	47.5	86	<b>42.6</b>
<b>Total</b>	<b>106</b>		<b>96</b>		<b>202</b>	

Source: Primary data

**Interpretation:** The above table reveals that 57.4 % of the respondent has not faced with any health issues during the corona pandemic. Whereas,42.6% has faced with health ailments.

**Table-3: State of expenses among age group**

Expenses	AgeGroup						Total	
	24-44		45-64		65+			
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
<b>Decreased</b>	41	20.3	10	5.0	6	3.0	57	<b>28.2</b>
<b>Increased</b>	37	18.3	40	19.8	32	15.8	109	<b>54.0</b>
<b>Same as often</b>	19	9.4	13	6.4	4	2.0	36	<b>17.8</b>
Total	<b>97</b>	<b>48</b>	<b>63</b>	<b>31.2</b>	<b>42</b>	<b>20.8</b>	<b>202</b>	<b>100</b>

Source: Primary data

**Interpretation:** From the above table it can be concluded that 28.2 % of the respondent's health expenditure has been decreased,54% of the respondents health expenditure has been increased and 17.8% of the respondents consider that there is no change in expenditure. Therefore, it can be concluded that health expenditure has been majorly increased between the age group

**Association between age group and health expenditure**

**H<sub>0</sub>:** There is no association between age group and health expenditure.

**H<sub>1</sub>:** There is an association between age group and health expenditure.

**Table-4: Chi-Square Test**

	Value	df	Asymp. Sig. (2-sided)
<b>Pearson Chi-Square</b>	24.554 <sup>a</sup>	4	.000
<b>Likelihood Ratio</b>	25.271	4	.000
<b>N of Valid Cases</b>	202		

*\*p-value less than 0.05 (5%); i.e., highly associated with expenditure and age group*

**Interpretation:** It is seen from the above table that the probability of chi-square test is 0.000 the result is significant at 5% level. Since, the probability value is less than 0.05. Hence, the null hypothesis (H<sub>0</sub>) is rejected and the alternative hypothesis (H<sub>1</sub>) is accepted. The hypothesis, "Age group of the respondents and the expenditure spent on health" are associated.

**Table-5: Nature of medicines used among different age groups**

Nature of medicines	24-44		45-64		65+		Grand total	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
<b>Allopathy</b>	18	8.9	26	12.9	21	10.4	65	32.2
<b>Ayurvedic</b>	7	3.5	10	5.0	7	3.5	24	11.9
<b>Homeopathy</b>	5	2.5	2	1.0	4	2.0	11	5.4
<b>Naturopathy</b>	7	3.5	2	1.0		0.0	9	4.5
<b>Grand Total</b>	<b>37</b>	<b>18.3</b>	<b>40</b>	<b>19.8</b>	<b>32</b>	<b>15.8</b>	<b>109</b>	<b>54.0</b>

*Source: Primary data*

**Interpretation:** From the above table it can be concluded that majority of the respondents, i.e., 32.2% used allopathy medicines among 32.2% of the respondents 12.9 % belong to age group between 45-64, 11.9% used ayurvedic, 5.4% used homeopathy and 4.5% use naturopathy.

**Table-6: Awareness about insurance**

Age group	No		Yes		(Blank)		Grand Total	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
24-44	58	28.7	16	7.9	23	11.4	97	48.0
45-64	28	13.9	11	5.4	24	11.9	63	31.2
65+	17	8.4	11	5.4	14	6.9	42	20.8
<b>Grand Total</b>	<b>103</b>	<b>51.0</b>	<b>38</b>	<b>18.8</b>	<b>61</b>	<b>30.2</b>	<b>202</b>	<b>100</b>

Source: Primary data

**Interpretation:** From the above table it can be concluded that majority of the respondents i.e 51% are not aware about the health insurance and 38% are aware about health insurance.

#### IV SUGGESTIONS

- Government has to concentrate on patients with other health issues who will be badly affected due to jam log on their routine checkups.
- Government can promote Indian medicines by creating awareness among people and also make them avail it free of cost or at concessional price due to economic backlog prevailing in the economy.
- Substantial increase in public health is needed to ensure adequate medicines.
- Medicines can be made available at the patients door step.
- Private hospitals and dispensaries has to be provisioned to charge lesser than usual.
- Special channels can be opened to speed up the medical supplies.
- Government has to create awareness about health insurance among individuals in order to overcome sudden economic crisis.

#### CONCLUSION

The study has found out that majority of respondents health expenditure has tremendously increased especially among the age ranging between 45-64 .The main reason for such increase in expenditure is due to country wide lockdown. Systematic approaches has to be undertaken and prioritize the patients with other health issues and necessary measures has to be taken in-order to combat the negligence caused to them.As, COVID-19 pandemic continuous to expand individuals are likely to face challenges on numerous issues especially with health. Government has to increase the per capita health expenditure in order to overcome economic crisis of the individuals.

#### References

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