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Emphasis on Health Insurance in India – Pre and Post-COVID-19 Syndrome

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Abstract

The study includes knowing the awareness and knowledge level of various medical insurance benefits and exploring e-health insurance's reach during pre and post-COVID-19. The objectives are achieved through appropriate data and substantiated with statistical analysis. The research design for the study is descriptive, recording the awareness level and intensity of knowledge towards various health insurance plans and associated benefits and e-health insurance plans reached among 150 respondents living in the southern part of India. They approached through a mail survey with a structured questionnaire of formal statements evaluated through a five-point Likert scale adopting the area sampling technique. The data were collected and managed with the help of SPSS V.25. A paired sample t-test was employed to evaluate the prior and after-effects of COVID-19 syndrome in the health insurance industry. The statistical results reveal significance to all the variables admitted into the study; therefore, the assumed null hypothesis was rejected entirely, and it was agreed that the COVID-19 syndrome significantly impacts the acceptance and exploration of health insurance amongst the people. Central and state governments have taken a lot more initiative to ensure universal health insurance coverage to Pan India. Still, again it is not only the collective but individual responsibility to have a health insurance plan that fits every individual's unique requirements. The myth of health insurance was the deadly investment

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and waste move vanished, and they agreed health insurance is essential to living happy, healthy and wealthy life in the future.

Keywords: Awareness, Benefits, Knowledge, e-health insurance, Health Insurance plan

1 Introduction

Health Insurance emerged as the most critical finance and health-related plan in 2021 in India and like countries. The abusive syndrome of COVID-19 most supports the emergence spread across the world. Basically, western countries and well-developed nations are already having and practising health insurance schemes among their citizens for every health-related issue and treatment. Even so, many financial outsourcing facilities rendered by the Knowledge processing companies in India are majorly dealt with foreign insurance clients and the retrieval of the same. The basic elements of a health insurance scheme consist of functions, modus operandi, and parties involved therein. The functional elements of health insurance covers Solidarity, Risk pooling, Equity and Empowerment according to Insurance Regulatory Development Authority of India (IRDA) [Guidelines on Standard Individual Health Insurance Product, 2020]; the modus operandi involves Insurance premium payment, Risk management and coverage of risk, administration and monitoring of health coverage and health providers agreements and tie ups; the parties are Insurer who observe the insurance policy and paying the premium to secure their life in case of any medical emergency and plan for their cash less treatment, organizer are the companies who are offering the health insurance scheme and developing network with all medical facilities and infrastructure to provide seamless benefits to all the insurer; provider are the people who are originally involved in offering the medical services to the insurer against the medical insurance scheme, later they will receive the treatment fee from the organizer of the health insurance; Community in general will covers the health insurance providers, organizers, beneficiaries and the society in large seeking he cashless treatment for their future health issues [Health in India, Report No. 586 on Social Consumption of Health Survey, 2020].

Health Insurance is nowadays observed as part of necessitated basic needs such as food, water, shelter, and clothes. The hi-fi lifestyle, changed patterns of food habits, cultural assassination, and social ruin will directly affect climatic change, global warming, ecological and economic imbalance, bio-wars, and human atrocities, are strongly pave the way to gain ill-health in the future. In most underdeveloped and developing nations, other economic factors like low per capita income, concentrated economic power, food scarcity, economic recession, overpopulation, underemployment and unemployment, lack of awareness of the health-related concerns due to poor literacy, size of downtrodden people, and political instability will directly cause the physical, mental and social health of the humans as evidenced from the Sri Lankan recession recently.

The reasons for the people moving towards the absorption of health insurance schemes, especially post-COVID-19, are it is considered a suitable way of removing financing barriers while seeking health care needs, ensuring financial protection against the high medical expenses that will be occurring in the future, enables the policy holders to negotiate with the health insurance providers for better quality health care at their desired health centre for having speedy and secured recovery. The understanding of the Government towards health insurance and offering the PAN INDIA program irrespective of age, gender, location, and other disparities. The basic level assurance was ensured by the health insurance initiatives of State cum Central governments to the rural poor those who are not affordable to pay for the insurance schemes through Rashtriya Swasthya Bima Yojana (RSBY), New Rural

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Cooperative Medical Scheme (NRCMS) and Tamilnadu Chief Minister's Comprehensive Health Insurance Scheme. The schemes like ACCORD, DHAN, and medical insurance cards issued by the state government are considered the best example to assure health insurance provisions to all citizens. In Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (AB-PMJAY), a Central government scheme, only one rupee will be debited from the accounts of the citizen per year for providing the health insurance benefits of INR 2,00,000 for the recovery [Periodic Labour Force Survey (PLFS) Annual Report on 2018-19, 2020]. Even a few State governments established tie-ups with insurance providers to offer health insurance schemes to the general public FREE of Cost; through this, the person who is in need to undergo surgery and special treatments are ultimately benefited from the medical coverage. But the other expenses like pre and post-treatment, hospitalization and in-patient fee, and other expenditure that occurred during the treatment period cannot be covered through this government-sponsored health insurance scheme. Henceforth, it is directed and suggested to people in general to observe the health insurance plan for their medical treatment purpose.

The need and importance of health insurance schemes have emerged amongst the public in India, and it has been recognized obviously after the entry of COVID-19 syndrome. Earlier to that, many health insurance schemes were offered by corporate companies to their employees to cover their health-related issues and treatments by establishing an alliance with insurance providers [Report of National Health Authority - States / UTs at a Glance, 2021]. The Government of India has already initiated and practising lot many works to ensure guaranteed health insurance to everyone, it passed out five different acts, The Employees (Workmen's) Compensation Act, 1923; The Employees' State Insurance Act, 1948; Employees' Provident Funds & Miscellaneous Provisions Act, 1952; The Maternity Benefit Act, 1961; and The Payment of Gratuity Act, 1972; organizations like Employee State Insurance Ltd., and the Social security benefits to the citizens are mainly managed by Employees' State Insurance Corporation (ESIC) and Employees' Provident Fund Organisation (EPFO) which are closely monitored by Ministry of labour and employment in India [Report of Labour Bureau, 2015].

In spite of pre-existing seasonal decreases spoiling health, now the add-on most vulnerable COVID-19 also reasoned the ever-reticular pandemic situation. The experts have also given a warning about the possibility of Covid-19's fourth wave. Hence the primitive opines of the people deliberated that the safe and ideal way to be prepared for COVID-19 is to adhere to the guidelines and protocols strictly and also definitely buy a valid and viable health insurance plan which gives seamless treatment in the future.

According to NSSO's 75th Social Consumption of Health Survey held in 2017-18, [Social Consumption of Health Survey, 2018]. As mentioned in the National Health Accounts, 2016-17, Union Budget, and RBI: State Finances: A Study of Budgets of 2020-21, India's Government spending on health at 1.5% of GDP is among the lowest in the world. [State Finances: A Study of Budgets of 2020-21]

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| Insurance Scheme | Individuals Eligible or Covered (cr.) | Percentage of Population Eligible | Families Eligible or Covered (cr.) |
|--|---|---|--|
| Government Subsidized Schemes | 69 | 51% | 15.3 |
| AB-PMJAY (w/o State Extension Schemes) | 49 | 36% | 10.9 |
| AB-PMJAY State Extension Schemes | 20 | 15% | 4.4 |
| Social Health Insurance Schemes | 14 | 10% | 3.6 |
| Employees' State Insurance Scheme (ESIS) | 13.6 | 10% | 3.5 |
| Central Government Health Scheme | 0.4 | 0.3% | 0.13 |
| Private Voluntary Health Insurance (PVHI) | 11.5 | 9% | 2.6 |
| Total Eligible or Covered (assuming no overlap) | 94.5 | 70% | 21.5 |
| Total Population / Families | 135 | | 30 |
| Uncovered Population / Families | 40.5 | 30% | 8.5 |

Figure 1- Number of individuals and families eligible or covered by health insurance schemes Source: NITI Aayog – Health Insurance for India's Missing Middle

The 'missing middle' is a broad category that lacks health insurance, positioned between the deprived poorer sections and the relatively well-off organized sector. [Health Insurance for India's Missing Middle, 2021]

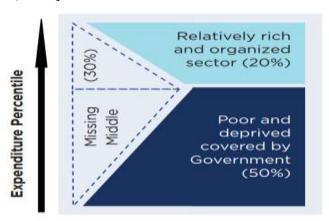


Figure 2 – Percentage of population covered and uncovered in health insurance plan Source: NITI Aayog – Health Insurance for India's Missing Middle

The poor are covered by Government subsidized health insurance schemes (PMJAY + State schemes), and the relatively rich and organized sector are covered by Private Voluntary Health Insurance and Social Health Insurance Schemes, HI and SHI programs, the Missing Middle between the poor and the relatively rich are the really uncovered segment of the health insurance plan.

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1.1 Types of health insurance plans

- Hospitalization
- Coverage for pre and post hospitalization
- Family Floater Health Insurance
- Pre-Existing Disease Cover Plans
- Senior Citizen Health Insurance
- Maternity Health Insurance
- Hospital daily cash benefit plans
- Critical illness plans
- Disease-specific special plans
- Complete coverage Plans

1.2 Benefits from Health Insurance Plans

- Cashless treatment
- Free medical check-ups
- Reimbursement of Pre and post-hospitalization expenses
- All day-care treatments
- Ambulance services
- Daily Hospital Cash
- E-opinion on Illness
- Home healthcare services
- AYUSH (Ayurveda, Unani, Siddha, and Homeopathy) Benefits
- Rapid claim settlement
- Lengthy duration and policy range
- No Claim Bonus
- Large hospital network services
- Renewable benefits
- Tax benefit
- Coverage of Non-medical expenses

1.3 e-Health Insurance Benefits

- Convenient through the App
- Secured payment modes on a digital platform
- Obtain instant quotations and policy documents
- Customized health insurance plan
- Value-added services and claims are at a 'click.'
- Add-on facility to family coverage
- 24*7 Availability
- Time-Saving
- Easy to Compare
- Discounts
- Huge information enabling Decision support

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2 Review of literature

The following is the existing review of literature relevant to the study of health insurance and the wide range of coverage, benefits, challenges, calculations of premiums, and other factors determining the health insurance premium both from domestic and international research references,

Kawuki et al. (2022) aim at examining the prevalence of health insurance utilization and its association with women empowerment as well as other socio-demographic factors among Rwandan women. Although women's empowerment has been viewed as a cost-effective strategy for the reduction of maternal and child morbidity and mortality, as it enables women to tackle the barriers to accessing healthcare, its association with health insurance usage has been barely investigated. The study used Rwanda Demographic and Health Survey (RDHS) 2020 data from 14,634 women aged 15-49 years who were selected using multistage sampling. A high proportion of Rwandan women had health insurance, but it was negatively associated with women's empowerment. Therefore, tailoring mass-media material considering the specific knowledge gaps to address misinformation, as well as addressing regional imbalance by improving women's access to health facilities/services, are key in increasing coverage of health insurance among women in Rwanda.

Meitei & Singh (2022) analyzed the coverage of health insurance and its correlates in the northeastern region of India. The study accessed the raw data of the National Family Health Survey (NFHS-4) (2015–16), which was an extensive, multi-round survey conducted in a representative sample of households throughout India, which included socioeconomic, demographic, and information on coverage of health insurance of any member of the household. The multivariate analysis of logistic regression was adopted to find the correlates of health insurance for all eight northeastern states of India. The study focuses only on the coverage and correlates of health insurance. Further evaluation studies on each scheme of social health insurance are needed for proper assessment of the health insurance schemes in the region. The NFHS-4 put up the finding that in the northeastern part of India, the coverage of health insurance had been low. This implied that the region could fall into poverty due to high medical expenses on health. Taking account of multiple health insurance providers, risk pooling and consolidation of health insurance providers have become the need of the hour.

Okuzu et al. (2022) ensured that all people could access quality health services, safeguarding them from public health risks and impoverishment from out-of-pocket payments for healthcare when household members are sick. From May to July 2022, adopted a cross-sectional case study design combining: (i) a literature review of the effects of UHC with (ii) a document analysis of health insurance systems in Nigeria and (iii) a secondary analysis of health insurance datasets to understand experiences of deploying MedStrat, a locally-developed digital health insurance management system, and its features that support the administration of health insurance schemes in multiple states of Nigeria. Preliminary findings suggest that digital insurance management systems can help to increase the number of enrolees for insurance, especially among poor households. Three contextual enablers of the adoption of digital insurance schemes were a favourable policy environment, public-private partnerships, and sustained stakeholder engagement and training.

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Adjei-Mantey & Horioka (2022) analyzed the determinants of health insurance enrolment in Ghana because its public health insurance system (the National Health Insurance Scheme or NHIS) is, in theory, mandatory, but is, in actual practice, voluntary, with only about 40% to 45% of the population enrolled in the scheme. Our empirical findings show that risk points have a significant impact on human health insurance enrolment, with risk-averse individuals being significantly more likely than other households to enrol in health insurance. Moreover, findings also show that very poor households are significantly more likely to enrol in health insurance than other households, perhaps because they are exempt from paying premiums for health insurance. Finally, our findings also show that the availability of health infrastructure facilities in one's own community significantly decreasing the expenditures on healthcare.

Behzad et al. (2022) assessed willingness to join and willingness to pay for health insurance in Afghanistan and identified associated determinants. A household survey was conducted. Two health insurance and two medicine insurance packages were explained to respondents, who were then asked if they would be interest to join the packages and pay for them. The double-bounded dichotomous choice contingent valuation method was used to elicit the maximum amount respondents would be willing to pay for the various benefit packages. Key determinants of willingness to join and to pay were similar, including the provinces where respondents were located, wealth status, health expenditures, and some demographic characteristics.

Balqis-Ali et al. (2021) attempted to find the factors associated with not having private health insurance in Malaysia. They analyzed data involving 19 959 respondents from the 2015 National Health Morbidity Survey. It described the prevalence of not having health insurance and conducted binary logistic regression to identify determinants of uninsured status. A total of 56.6% of the study population was uninsured. The likelihood of being uninsured also increased with increasing household size, while the inversed trend was seen for household income. A substantial proportion of the population in Malaysia does not have private health insurance, and these sub-groups have limited preferential choices for providers, facilities, and care.

De Souza Júnior et al. (2021) described health insurance coverage in Brazil. Data from the 2013 and 2019 editions of the National Health Survey (PNS) were analyzed. The medical or dental health insurance coverage was analyzed according to demographic and socioeconomic characteristics, work status, urban/rural area, and Federation Unit. In 2019, only 30.7% of formal workers reported the monthly payment was made directly to the providers, while 72.7% of informal workers reported this information. About 92% of medical health insurance covers hospitalization, and almost 20% of women with health insurance are not covered for labour. Only 11.7% of women aged between 15 and 44 are covered for childbirth by health insurance. The results show that health insurance coverage is still quite unequal, reinforcing the Unified Health System's (SUS) importance for the Brazilian population.

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Seid & Ahmed (2021) conducted a cross-sectional study using the 2016 Ethiopia Demographic and Health Survey (EDHS) data set. About 4278 mothers who had delivered at least one child in the last five years of the survey were selected for the study. Multivariate logistic regression analysis was performed to measure the relationship between health insurance enrolment and maternal health care service utilization by controlling confounders. About 18.1% of women from households in the poorest wealth quantile had no health insurance coverage for maternal health care services. Moreover, 84% of women who lived in a rural area did not enclose by health insurance. Health insurance enrolment enterprises must be available to all pregnant women, particularly those of poorer socioeconomic rank.

Mamun et al. (2021) explored the effects of insurance literacy, perceived usefulness, attitude toward health insurance, subjective norm, and perceived behavioural control on the intention to purchase and the actual purchase of health insurance among working adults in Malaysia. This quantitative study adopted the cross-sectional design with data gathered from 1,308 working adults through a Google form link shared on social media. Upon analysis, the outcomes revealed that insurance literacy, perceived usefulness, attitude toward health insurance, subjective norm, and perceived behavioural control exerted a significantly positive effect on the intention to purchase health insurance. Intention to purchase health insurance exhibited a significantly positive impact on the actual purchase of health insurance.

3 Research Gap

The previous research reviews collected from Indian and foreign soil are referred to and find the gap for the present study. The current study is focused on the awareness level of the Indians towards the Medical Insurance scheme pre-post-COVID-19 and the benefits of medical insurance and e-health insurance during pre and post-COVID-19. It explores the level of awareness among the respondents living in the southern part of India.

4 Statement of the Problem

Medical and health insurance are not viewed as the most important forms of investment by Indian investors. The COVID-19 pandemic develops a contingency amongst people to search for the insurance scheme to cope with their medical expenses needs by time most people are trying to understand the medical insurance policy and their coverage for the unexpected situation for human health. It is now mandatory to study the level of deep awareness about health and medical insurance amongst the people and its impact on society. The current study attempted to narrate the same.

5 Objectives of the Study

The following are the core objectives assumed for the study,

- To know the awareness level of medical insurance during pre and post-COVID-19.
- To study the knowledge level on various benefits of medical insurance.
- To explore the benefits of e-health insurance during pre and post-COVID-19.

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6 Need for the study

The general myth around the Indian investment industry is insurance premiums and the different modes of investment are always deadly investments; it does not cover productivity and profitability as well as wealth maximization of the investment. The pandemic situation creates a different form of an urge to understand the importance of medical insurance and the effect of health insurance in claiming health-related benefits whenever contingencies are raised therein. The myth was abandoned after experiencing COVID-19, and like to explore various insurance schemes available in the market. This study emerged based on these changing attitudes of the people towards medical insurance schemes, and it needs to be addressed across the state.

7 Designs of the Study

- **7.1 Research design** The design of the study explores the basic information about the way of execution of the research work. In the present study, the descriptive research design was used to explicit the opinion of the respondents towards the health insurance policy during pre and post-COVID-19. The respondents' opinion towards health insurance is moving towards positive, especially post-COVID-19, but this study reveals their opinion of respondents towards health insurance both prior to and after COVID-19. The opinion was observed based on their awareness level towards various types of health insurance plan and their knowledge level towards the benefits associated with different health insurance plans. The intensity of the e-health insurance system and its penetration into society also evolved through the current study.
- **7.2 Data design** both primary and secondary data were employed to develop the study; primary data for the study was collected through a structured questionnaire consisting of standard statements and benefits associated with health insurance schemes using the five-point Likert Scale. The secondary data for the study was obtained from various internet sources, which are authenticated websites of government-organized bodies and insurance governance authorities regarding health insurance policies.
- **7.3 Sampling design** the primary data for the study was directly obtained from the respondents. The respondents for the study are identified through the non-probability sampling method, under which the requisite number of respondents arrive with the area sampling technique. The primary data was collected through a Mail survey, which included respondents living in the southern part of India.
- **7.4 Statistical design** The collected data were organized, tabulated, coded, and analyzed through Statistical Package for Social Science Version 25. Appropriate statistical tool paired sample 't' test was used to evaluate the pre and post-effects of COVID-19 on health Insurance awareness levels.
- **7.5 Limitations** The study has majorly few limitations pertaining to the area of coverage, the scope of data, the application of analysis, and the bias of respondents. The southern part of India and the different states located in these regions alone be included in the study; it was not observed as a PAN INDIA survey. The scope of the study was very limited to health insurance schemes only. The study is very limited to revealing the prior and after-effects of COVID-19 on the awareness level of the health insurance scheme. The respondents may or may not reveal the truth of their knowledge level.

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7.6 Hypothesis – the hypothesis of the current study is developed in a crystal-clear manner; it emphasizes the importance of health insurance between pre and post-COVID-19. Thus, it is developed as

H1: Awareness levels on health insurance plans between pre and post-COVID-19 are the same.

H2: Knowledge level on benefits derived from health insurance plans between pre and post-COVID - 19 are the same.

H3: The reach of e-health insurance plans between pre and post-COVID-19 are the same.

7.7 Analysis Summary

The results of the paired sample t-test after employing the primary data administered through the structured questionnaire were presented in the following table to meet the objectives either prove or disprove the assumed hypothesis of the study. The paired sample t-test is a peculiar statistical tool which is used to evolve the prior and after-effects of assuming any changes or tests. Here the COVID-19 effect was assumed as the changing scenario, and its effect on the testing variable health insurance was analyzed, and the results were presented in the following tables.

The awareness level of respondents towards various health insurance plans prior to and after COVID-19 was studied through paired sample t-tests. The null hypothesis is that the awareness level of health insurance plans prior to and after COVID-19 are the same; the statistical test results were published in Table 1. There are ten different plans are assumed to test the mean difference between prior and after COVID-19 health insurance awareness, are Hospitalization, Coverage for pre and post-hospitalization, Family Floater Health Insurance, Pre-Existing Disease Cover Plans, Senior Citizen Health Insurance, Maternity Health Insurance, Hospital daily cash benefit plans, Critical illness plans, Disease-specific special plans, and Complete Coverage Plans.

Table 1 - Paired Samples Test on Awareness Level of Health Insurance Plan

| | | Paired Differences | | | | | | | |
|----------|------------------------------------|--------------------|-------------------------|------------|-------------------|--------|---------|-----|----------|
| | | | 95% Confidence Interval | | | | | | |
| | | | Std. | Std. Error | of the Difference | | | | Sig. (2- |
| | | Mean | Deviation | Mean | Lower | Upper | t | df | tailed) |
| Pair 1 | Hospitalization | -1.893 | 1.680 | .137 | -2.164 | -1.622 | -13.807 | 149 | .000 |
| Pair 2 | Coverage for pre | | | | | | | | |
| | and post | -1.980 | 1.653 | .135 | -2.247 | -1.713 | -14.674 | 149 | .000 |
| Doi: 2 | hospitalization | | | | | | | | |
| Pair 3 | Family Floater Health Insurance | -2.073 | 1.639 | .134 | -2.338 | -1.809 | -15.494 | 149 | .000 |
| Pair 4 | Pre-Existing | | | | | | | | |
| | Disease Cover | -1.987 | 1.663 | .136 | -2.255 | -1.718 | -14.633 | 149 | .000 |
| | Plans | | | | | | | | |
| Pair 5 | Senior Citizen | -1.913 | 1.753 | .143 | -2.196 | -1.631 | -13.368 | 149 | .000 |
| | Health Insurance | 1.010 | 1.700 | .140 | 2.100 | 1.001 | 10.000 | 140 | .000 |
| Pair 6 | Maternity Health Insurance | -2.033 | 1.640 | .134 | -2.298 | -1.769 | -15.183 | 149 | .000 |
| Pair 7 | Hospital daily cash | | | | | | | | |
| I all I | benefit plans | -1.853 | 1.611 | .132 | -2.113 | -1.593 | -14.088 | 149 | .000 |
| Pair 8 | Critical illness plans | -2.027 | 1.470 | .120 | -2.264 | -1.790 | -16.887 | 149 | .000 |
| Pair 9 | Disease-specific | -1.906 | 1.777 | .14512 | -2.193 | -1.619 | -13.138 | 149 | .000 |
| Pair10 | special plans Complete coverage | | | | | | | | |
| 1 all 10 | Plans | -1.867 | 1.717 | .140 | -2.144 | -1.590 | -13.314 | 149 | .000 |

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The mean difference between the prior and after effects were observed moderately negative for all the health insurance plans. The statistical result shows significance with the p-value is .000 at a 95 per cent confidence interval range for all the health insurance plans; it was further concluded that the null hypothesis is rejected and the awareness level towards health insurance plans between prior and after COVID-19 was significantly varied. Hence, COVID-19 has a significant effect on the creation of awareness levels among the respondents towards various health insurance plans.

The second table describes the knowledge level of the respondents regarding the benefits of the Health insurance plan. There are sixteen different benefits gathered from various health insurance plans and the intense knowledge level of respondents such as Cashless treatment, Free medical check-ups, Reimbursement of Pre and post-hospitalization expenses, All day care treatments, Ambulance services, Daily Hospital Cash, E-opinion for Illness, Home healthcare services, AYUSH (Ayurveda, Unani, Siddha, and Homeopathy) Benefits, Rapid claim settlement, Lengthy duration, and policy range, No claim Bonus, Large hospital network services, Renewable benefits, Tax benefit and Coverage of Non-medical expenses between prior and after COVID-19 are studied through paired sample 't-test with the null hypothesis that knowledge level on the benefits of health insurance plans prior and after COVID-19 are the same. The statistical result was published in the following table 2,

Table 2 - Paired Samples Test on Knowledge Level on the Benefits of Health Insurance Plan

| | bie 2 - Faired Samples 1 | Paired Differences | | | | | | | |
|----------------------------|---|--------------------|----------------|---------------|---|------------------|--------------------|------------|-------------|
| | | | Std. Devia | Std. Error | 95% Confidence Interval of the Difference | | | | Sig. (2- |
| | | Mean | on | Mean | Lower | Upper | t | df | tailed) |
| Pair 1 Pair 2 Pair 3 | Cashless treatment Free medical check-up Reimbursement of Pre | -1.953 -2.033 | 1.582 1.624 | .129 .133 | -2.208 -2.295 | -1.698 -1.771 | -15.127 -15.337 | 149 149 | .000 |
| | and post- hospitalization expenses | -1.967 | 1.615 | .132 | -2.227 | -1.706 | -14.910 | 149 | .000 |
| Pair 4 | All daycare treatments | -2.000 | 1.753 | .143 | -2.283 | -1.717 | -13.971 | 149 | .000 |
| Pair 5 | Ambulance services | -1.987 | 1.626 | .133 | -2.249 | -1.724 | -14.963 | 149 | .000 |
| Pair 6 | Daily Hospital Cash | -1.980 | 1.697 | .139 | -2.254 | -1.706 | -14.292 | 149 | .000 |
| Pair 7 | E-opinion for Illness | -2.100 | 1.583 | .129 | -2.355 | -1.845 | -16.245 | 149 | .000 |
| Pair 8 | Home healthcare services | -1.787 | 1.744 | .142 | -2.068 | -1.505 | -12.547 | 149 | .000 |
| Pair 9 | AYUSH (Ayurveda, Unani, Siddha, and Homeopathy) Benefits | -1.847 | 1.608 | .131 | -2.106 | -1.587 | -14.061 | 149 | .000 |
| Pair 10 | Rapid claim settlement | -1.927 | 1.559 | .127 | -2.178 | -1.675 | -15.135 | 149 | .000 |
| Pair 11 | Lengthy duration and policy range | -1.993 | 1.522 | .124 | -2.239 | -1.748 | -16.044 | 149 | .000 |
| Pair 12 | No claim Bonus | -1.913 | 1.567 | .128 | -2.166 | -1.661 | -14.954 | 149 | .000 |
| Pair 13 | Large hospital network services | -2.040 | 1.562 | .128 | -2.292 | -1.788 | -15.990 | 149 | .000 |
| Pair 14 Pair 15 | Renewable benefits Tax benefit | -1.880 -1.920 | 1.601 1.736 | .131 .142 | -2.138 -2.200 | -1.622 -1.640 | -14.383 -13.546 | 149 149 | .000 |
| Pair 16 | Coverage of Non- medical expenses | -1.920 | 1.697 | .139 | -2.194 | -1.646 | -13.858 | 149 | .000 |

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The mean difference between the prior and after effects were observed to be moderately negative for all the benefits of health insurance plans. The statistical result shows significance with the p-value is .000 at a 95 per cent confidence interval range for all the benefits of health insurance plans; it was further concluded that the null hypothesis is rejected and the knowledge level towards various benefits of health insurance plans between prior and after COVID-19 was significantly varied. Hence, COVID-19 has a significant influence on the knowledge level of the respondents regarding the benefits of various health insurance plans.

The third table describes the statistical results of paired sample t-test on the benefits of an e-health insurance plan with the null hypothesis that the reach of the benefits of an e-health insurance plan prior to and after COVID-19 are the same. The benefits of e-health insurance plans consist of Convenient through an App, Secured payment modes in a digital platform, Obtaining instant quotations and policy documents, Customized health insurance plan, and Value added services and claims at a 'click', Add-on facility to family coverage, 24*7 Availability, Time Saving, Easy to Compare, Discounts and Huge information enabling Decision support.

Table 3 - Paired Samples Test on Benefits of e-Health Insurance Plan

| | Paired Differences | | | | | | | | |
|--|--|--------------------------------------|----------------------------------|------------------------------|---|--------------------------------------|--|--------------------------|----------------------|
| | | | Std. Devia | Std. Error | 95% Confidence Interval of the Difference | | | | Sig. (2- |
| | | Mean | on | Mean | Lower | Upper | t | df | tailed) |
| Pair 1 | Convenient through App | -1.893 | 1.647 | .134 | -2.159 | -1.628 | -14.077 | 149 | .000 |
| Pair 2 | Secured payment modes in digital platform | -1.980 | 1.607 | .131 | -2.239 | -1.721 | -15.087 | 149 | .000 |
| Pair 3 | Obtain instant quotations and policy documents | -1.900 | 1.710 | .140 | -2.176 | -1.624 | -13.611 | 149 | .000 |
| Pair 4 | Customized health insurance plan | -1.927 | 1.773 | .145 | -2.213 | -1.641 | -13.312 | 149 | .000 |
| Pair 5 | Value-added services and claims are at a 'click.' | -1.987 | 1.537 | .125 | -2.235 | -1.739 | -15.831 | 149 | .000 |
| Pair 6 | Add-on facility to family coverage | -1.833 | 1.628 | .133 | -2.096 | -1.571 | -13.793 | 149 | .000 |
| Pair 7 Pair 8 Pair 9 Pair 10 Pair 11 | 24*7 Availability Time-Saving Easy to Compare Discounts Huge information | -1.940 -2.007 -1.907 -2.053 | 1.585 1.612 1.688 1.629 | .129 .132 .138 .133 | -2.196 -2.267 -2.179 -2.316 | -1.684 -1.747 -1.634 -1.790 | -14.988 -15.250 -13.832 -15.434 | 149 149 149 149 | .000 .000 .000 |
| | enabling Decision support | -1.913 | 1.718 | .140 | -2.191 | -1.636 | -13.638 | 149 | .000 |

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The mean difference between the prior and after COVID-19 effect was observed as moderately negative for all the benefits of e-health insurance plans. The statistical result shows significance with the p-value is .000 at a 95 per cent confidence interval range for all the benefits of e-health insurance plans; it was further concluded that the null hypothesis is rejected and the benefits of e-health insurance plans between prior and after COVID-19 were significantly varied. Hence, COVID-19 has a significant influence on the reach of e-health insurance plans amongst the respondents towards the benefits of various health insurance plans.

8 Practical Implications

Gone are the days of considering health insurance as the luxury part of life or it is for the higher income group and covering the rich segment of society. Those myths were completely eroded through the constant effort taken by both the Central and State government in designing and offering health insurance plans to cover all the citizens of India beyond the disparity through appropriate Information, Education, and Communication (IEC) towards health insurance plans. The importance of health insurance was highlighted only after the COVID-19 pandemic situation when people very much suffered to meet their medical contingencies. By the way, the concept of health insurance was not new to Indian soil. The Government understands the fundamentals of providing insurance to the needy, those who are not covered by any other schemes of the Government of India (GoI). The people living in the downtrodden limit and belonging to unorganized sectors of employment also be covered through the health insurance schemes. Even though the implications of health insurance have recently passed, it gains more importance only after the COVID-19 syndrome. The interest in exploring the benefits of health insurance and types of health insurance, intense information, and benefits associated with different plans of health insurance are underlined only after the COVID-19 syndrome. The improved knowledge of the health insurance plan and its benefits with amplifying opportunities to avail the same through online mode will attract a greater number of policyholders towards it in recent times. E-health insurance plans play a vital role in designing and offering customized health insurance plan to fit the requirements of either the individual or to cover the total family.

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9 Conclusion

In spite of the great Indian effort in the Health Insurance sector and claiming the largest fully Government subsidized scheme in the world, it has registered Universal Health Coverage through Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) covering nearly 40% of India's population at the bottom of the pyramid covering both rural and urban segment. With digital world trends taking over the world, buying a health insurance plan from anywhere across the globe helps you in saving time, energy, and effort. It is concluded that health insurance is no more considered a waste expenditure; it gains more advantages and prosperity to live the most comfortable, healthy, and wealthy life in the future.

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