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A STUDY ON IMPACT OF COVID 19 ON AWARENESS ABOUT TELECONSULTATION WITH SPECIAL REFERENCE TO E-SANJEEVINI SCHEME.

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ABSTRACT
Telemedicine, the provision of remote healthcare services through telecommunication technologies, has experienced significant growth in recent years. However, the COVID-19 pandemic acted as a catalyst, accelerating the adoption and expansion of telemedicine services worldwide. Union ministry for health and family welfare introduced e-sanjeevani platform, which has Enabled two types of telemedicine services viz. Doctor-to-Doctor(e-sanjeevani) and Patient-To-Doctor (e-sanjeevani OPD) teleconsultations. Offered at no cost, this e-health service is Rapidly gaining popularity as citizens. This study aims to explore the growth and impact of telemedicine services before and after the COVID-19 pandemic with special reference to E- Sanjeevani telemedicine platform. Non parametric tests like Wilcoxon Signed Rank Test, Mann- Whitney U Test were used for analysis.
KEY WORDS: *Telemedicine, Teleconsultation, Covid 19, Categories of hospitals, E- Sanjeevini*

INTRODUCTION

Telemedicine aims at blending advanced telecommunication technology with advanced health care facilities to provide hassle-free, speedy and contact less health care. Telemedicine emerged as a vital tool in the fight against the Covid 19 pandemic. It offered a safe and efficient alternative to in-person consultations, enabling healthcare providers to remotely diagnose, treat, and monitor patients. Telemedicine not only helped to protect both patients and healthcare professionals from potential exposure to the virus but also reduced the burden on healthcare facilities, allowing them to focus on critical COVID-19 cases. But even before the emergence of the COVID-19 pandemic, telemedicine services had already started gaining traction due to advancements in technology and the increasing need for accessible healthcare. However, it was primarily limited to specific use cases, such as remote consultations for patients in rural or underserved areas, and follow-up visits for chronic conditions. Teleconsultation is one of the applications of telemedicine. The growth of telemedicine during the pandemic not only facilitated the provision of primary care but also extended to various specialties, including mental health, dermatology, cardiology, and more. The telemedicine platforms offered virtual consultations, remote monitoring, electronic prescriptions, and even facilitated collaborations between healthcare professionals for improved patient outcomes. E-Sanjeevani platform, introduced by Union ministry for health and family welfare provides with telemedicine services free of cost and is gaining vast familiarity among public.

Th study aims to explore the growth and impact of teleconsultation service before and after the COVID-19 pandemic with special reference to E- Sanjeevani telemedicine platform. Appropriate non parametric tests were used for analysis.

REVIEW OF LITERATURE

Aditya Naskar et al., (2023) A study was directed to improve the productivity of telemedicine in rural regions, explicitly zeroing in on the client and supplier encounters of eSanjeevani in Jharkhand. The Government of Jharkhand presented, eSanjeevani, a far-reaching online telemedicine stage, to work with expert medical services meetings in remote regions. This program overhauled rustic wellbeing and health focuses (HWCs), empowering patients to interface with remote specialists through sound or video calls. The discoveries show that eSanjeevani has been fruitful in conveying reasonable, great expert counsels to rural networks, with specific advantages for ladies. Notwithstanding, there are a few moves that should be tended to, including working on the decrease of over-references, encouraging local area interest, improving the limit of the telemedicine labour force, and handling issues connected with the absence of digital assets in rural regions

K Ravindren Rajith et al., (2023) The review analyzes the impression of specialists and patients with respect to telepsychiatry administrations during the Coronavirus pandemic in Kerala, India. The article plans to give experiences into the telepsychiatry program's association and its effect on the continuity of mental medical services from the point of view of specialists and patients . Telepsychiatry can possibly develop as an elective model of emotional wellness administration conveyance, offering critical benefits to ladies, the old, and people confronting travel challenges. It ends up being practical choice for giving emotional wellness backing to populaces in jails, government, private offices, and distant regions through web-based stages. To guarantee the fruitful execution of telepsychiatry, clear legitimate and moral rules ought to be figured out, and satisfactory preparation for experts should be made accessible. Furthermore, upgrading the ease of use of online stages and altering them to offer psychotherapy, guiding administrations, and pharmacotherapy would be helpful.

Ashish Markan et al., (2022) The implementation of e-Sanjeevani has reformed health care sector by empowering trained specialists to give medical care from a distance, beyond conventional eye to eye experiences. E-Sanjeevani is an intelligent varying media application with chat box option. Their research effectively identifies the segment profile of patients looking for teleophthalmology discussions through this stage. The discoveries show that e-Sanjeevani really works with visual finding and convenient mediation. It ends up being a significant instrument for offering teleophthalmology interviews to far off regions, beating the difficulties of distance, time, and cost. Future mechanical progressions, including the joining of cut light based and fundus cameras, will additionally upgrade specialists' capacity to evaluate front section and fundus subtleties, prompting worked on quiet emergency and treatment.

Cherry Chu et al., (2021) This study plans to explore the use of telemedicine by rural Ontario inhabitants, both before and during the Coronavirus pandemic. Getting access to medical care is trying endeavor for rural patients, and telemedicine has arisen as an important arrangement in resolving this issue and conveying fundamental wellbeing administrations. Remarkably, during the pandemic, there was a critical flood in telemedicine reception among provincial patients in Ontario, including various subgroups like more seasoned people and those with ongoing circumstances. Curiously, the expansion in telemedicine utilization was more conspicuous in regions that are less rustic, rather than additional far-off districts. Further exploration is important to investigate the exceptional difficulties that rustic populaces experience in embracing telemedicine contrasted with their metropolitan partners. Also, it is critical to assess the impacts of telemedicine versus in-person care on different parts of medical services usage, results, and nature of care for helpless and in danger patient gatherings inside rural networks.

Ali Pourmand et al., (2021) This study explores the degree of experience clinical students and doctors have in telemedicine during their preparation. It stresses the significance of acquainting medical students with telemedicine schooling, as the future medical services ought to have this important ability to take care of underserved populaces lacking direct admittance to quality clinical benefits. Further investigation of techniques to integrate telemedicine training into clinical schools and residency programs merits investigating.

Saira Naima Hque(2021) The Coronavirus pandemic has prompted a change in psychological wellness care administrations from face to face to virtual interactions. A few changes in wellbeing strategies have impacted the reception of telehealth during this period. These progressions include advanced technology utilization, web network, remedies, and repayment for administrations. This article gives a brief outline of the telehealth strategy changes provoked by the pandemic and features key contemplations for medical services suppliers in carrying out and conveying telehealth programs from now on. The arrangement changes made in light of Coronavirus have actually brought obstructions down to telehealth reception by extending repayment, permitting the utilization of extra advancements, supporting specialized framework, and allowing solution for drug helped treatment through telehealth administrations.

METHODOLOGY OF THE STUDY

Ex post facto research design is proposed for the study. The people from Ernakulam district of Kerala state were the universe for study. The data for the study was collected from primary sources. The primary data was collected from the respondents through structures questionnaire. The sample size of study was 139 respondents from Ernakulam including both male and female. Data analysis has been done by appropriate Non parametric test. The study is done in two parts.

Part -1: To evaluate pre and post Covid awareness about teleconsultation among public
Part 2**:** To identify level of satisfaction derived by public from usage of teleconsultation services provided by various categories of Hospitals.

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Part 1: Evaluation of pre and post Covid awareness about teleconsultation among public

Study Hypothesis

H_0): There is no significant difference in awareness level about teleconsultation platform before and after the covid-19 pandemic.

Model Specification

Study aims at evaluating the awareness level about teleconsultation platform before and after the covid-19 pandemic.

TESTING OF HYPOTHESIS

Null hypothesis (H_0): There is no significant difference in awareness level about teleconsultation platform before and after the covid-19 pandemic.

Alternative hypothesis (H_1): There is significant difference in awareness level about teleconsultation platform before and after covid-19 pandemic.

Awareness about teleconsultation before covid-19

Reliability Statistics

Cronbach's Alpha	No. of Items
.746	5

Scale Statistics

Mean	Variance	Std. Deviation	No of Items
19.04	7.060	2.657	5

Variables contributing to the awareness about teleconsultation before covid was scaled and both reliability statistic and scale statistic concur accuracy

Awareness about teleconsultation after covid-19

Reliability Statistics

Cronbach's Alpha	N of Items
.889	9

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
34.39	22.947	4.790	9

Variables contributing to the awareness about teleconsultation after Covid was scaled and both reliability statistic and scale statistic concur accuracy

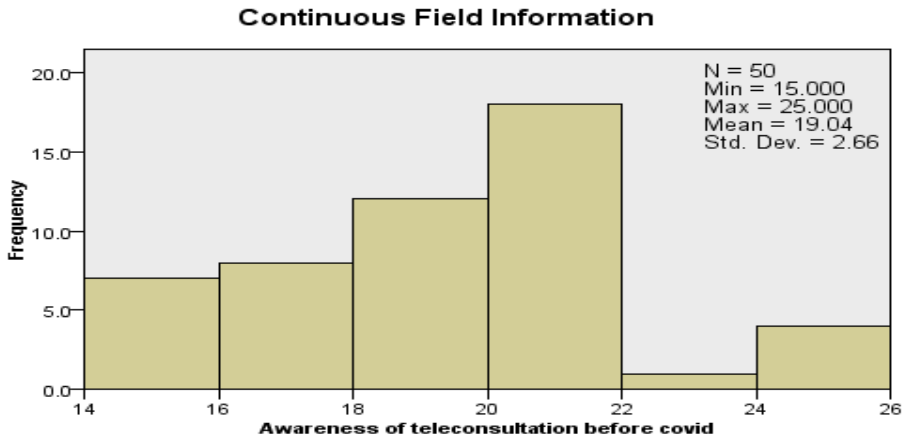
WILCOXON SIGNED RANK TEST

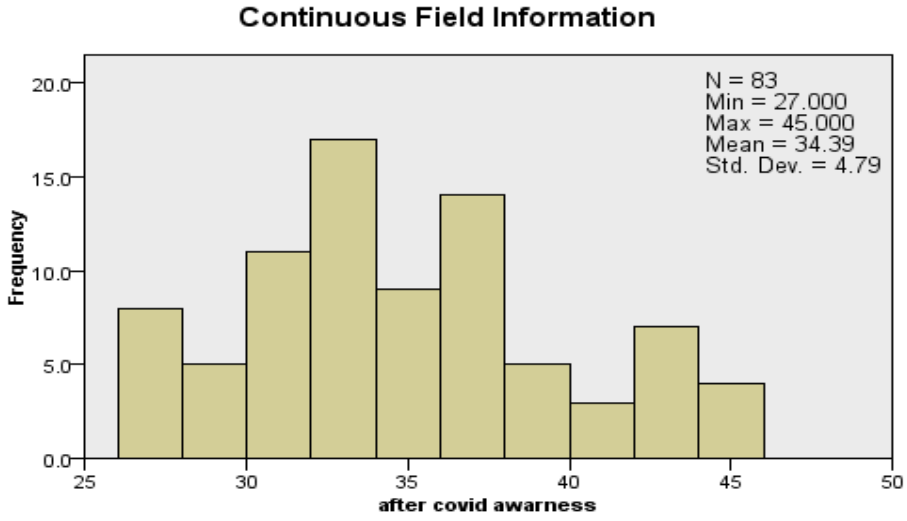
Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between Awareness of teleconsultation before covid and after covid awarness equals 0.	Related-Samples Wilcoxon Signed Rank Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

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RESULTS AND DISCUSSIONS

The median of difference between awareness of teleconsultation before covid and after covid awareness equals **0**. The significance level is 0.05. **As P< 0.05**, since the null hypotheses was rejected, it means there is evidence to suggest that there is indeed a significant difference in the awareness level about teleconsultation platform before and after the covid-19 pandemic.The mean value of awareness level before and after covid-19 pandemic, which are 19.04 and 34.39 respectively. By comparing the mean value, we can observe that the awareness level about teleconsultation platform has increased after the covid-19 pandemic. It is concluded that, there is significant difference in awareness level about teleconsultation platform before and after covid-19 pandemic, the alternative hypothesis (H_1) is accepted.

Part 2: Level of satisfaction derived by public from usage of teleconsultation services provided by various categories of Hospitals

Study Hypothesis

(H_0): There is no significant difference in satisfaction level of E- Sanjeevani and Category of hospitals providing teleconsultation service.

Model Specification

Study aims at evaluating the satisfaction level of E- Sanjeevani Category of hospitals providing teleconsultation service.

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TESTING OF HYPOTHESIS

NULL HYPOTHESIS (H_0): There is no significant difference in satisfaction level of E- Sanjeevani and Category of hospitals providing teleconsultation service.

ALTERNATIVE HYPOTHESIS (H_1): There is a significant difference in satisfaction level between E-Sanjeevani and the category of hospitals providing teleconsultation service

Satisfaction of E Sanjeevani

Reliability Statistics

Cronbach's Alpha	No of Items
.838	4

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
15.68	5.737	2.395	4

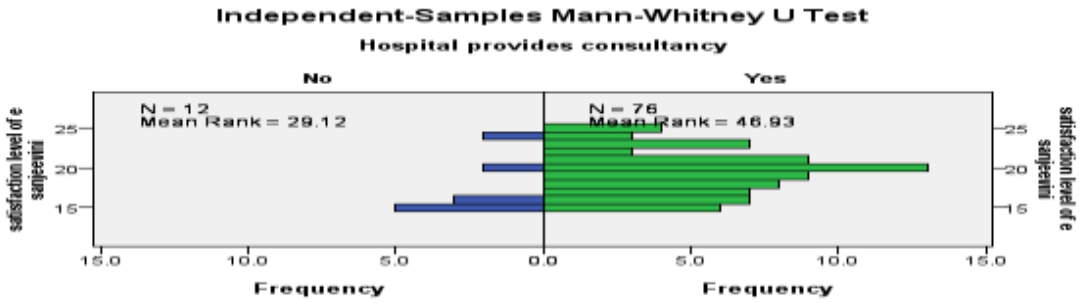
Variables contributing to satisfaction of E Sanjeevini was scaled and both reliability statistic and scale statistic concur accuracy.

MANN- WHITNEY U TEST

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of satisfaction level of e sanjeevini is the same across categories of Hospital provides consultancy.	Independent-Samples Mann-Whitney U Test	.024	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.



Total N	88
Mann-Whitney U	271.500
Wilcoxon W	349.500
Test Statistic	271.500
Standard Error	81.730
Standardized Test Statistic	-2.257
Asymptotic Sig. (2-sided test)	.024

INFERENCE

After analysis the data it can be found that P value is 0.024, which is less than significance level (0.05), thus reject null hypothesis that there is no significant difference in satisfaction level of e-Sanjeevani and category of hospital providing teleconsultation service. So, it can be, concluded that satisfaction level of e-Sanjeevani varies among category of hospitals providing the same and customers can clearly identify the difference.

CONCLUSION

Teleconsultation being a blend of modern telecommunication facilities with medical field helps the stake holders to prevail over the most common barriers distance and time. Telemedicine facilitates a particular patient to access his desired medical specialist and care in his home. Days of tokens and long ques for consultation is dwindling in the modern busy world, and teleconsultation is one of the main agents of change in this field.

Awareness and satisfaction are two important quality variables that is required by an agent of change The study conducted in two parts evaluated the awareness about the concept of telecommunication among public in part 1.The level of satisfaction they derive from using this particular facility is evaluated in part-2. Study also examined the impact of pandemic Covid 19 in level of awareness about teleconsultation among the public.

It was found in part-1 that public used teleconsultation facilities in large scale during the pandemic days where restriction was imposed for mobility and face to face interactions, and the awareness about the facility increased in large scale, so undoubtfully we can state after this study that awareness level of public about teleconsultation witnessed a hike during the study period and Covid 19 acted as a catalyst for this hike.

Results from part-2 infer that public expressed a particular degree of satisfaction regarding the teleconsultation services availed by them and these satisfaction level varies among category of service providers. Offering the same. So, it can be concluded that respondents are aware and they meretriciously categories the teleconsultation offered by various categories of hospitals and have a clear opinion about the same which is reflected in their satisfaction level.

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