

STUDY ON ROLE OF TELEMEDICINE DURING COVID-19 PANDEMIC AND
IMPACT ON HEALTHCARE PROVIDER

Dissertation Submitted to



The IIHMR University, Jaipur

for the partial fulfilment for the award of the degree of

Master of Business Administration (MBA)

in

Hospital and Health Management

by

NIGAM RASHMI DHAR

Under the Supervision and Guidance of

DR. SANDESH KUMAR SHARMA

2021

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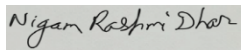
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2021

DECLARATION BY STUDENT

I hereby declare that this dissertation titled STUDY ON ROLE OF TELEMEDICINE DURING COVID-19 PANDEMIC AND IMPACT ON HEALTHCARE PROVIDER is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.



Nigam Rashmi Dhar

19-June-2021

CERTIFICATE

This is to certify that Nigam Rashmi Dhar in partial fulfillment of the requirements for the award of the degree of MBA - Hospital and Health Management from the IIHMR University, Jaipur have successfully completed his internship at ASIAN HEART INSTITUTE AND RESEARCH CENTRE PRIVATE LIMITED, Mumbai during March 27, 2021 to June 19, 2021.

Place: Mumbai
Date: 24/6/2021


Mukesh Sabharwal
CEO
Asian Heart Institute, Mumbai

2



CERTIFICATE

This is to certify that Nigam Rashmi Dhar in ASIAN HEART INSTITUTE AND RESEARCH CENTRE PRIVATE LIMITED, Mumbai as Executive Assistant to CEO (Management Trainee) has successfully completed his dissertation/internship on "A STUDY ON POST COVID-19 IMPACT ABOUT TELEMEDICINE AMONG DOCTORS OF INDIA" during March 27, 2021 to June 19, 2021.

Place: Mumbai
Date: 24/6/2021

Mukesh Subbarwal
CEO
Asian Heart Institute, Mumbai



3



CERTIFICATE

This is to certify that dissertation titled STUDY ON ROLE OF TELEMEDICINE DURING COVID-19 PANDEMIC AND IMPACT ON HEALTHCARE PROVIDER is a record of the research work undertaken by Nigam Rashmi Dhar in partial fulfillment of the requirements for the award of the degree of MBA Hospital and Health Management from the IIHMR University, Jaipur under my guidance and supervision and his/her approach to the research study has been sincere, scientific, and analytical.

Faculty Guide

IIHMR University, Jaipur

Date

School Dean

IIHMR University, Jaipur

Date

STUDY ON ROLE OF TELEMEDICINE DURING COVID-19 PANDEMIC AND IMPACT ON HEALTHCARE PROVIDER

Abstract

(500 words)- stating study objectives, methodology, analysis and conclusion,)

TITLE- STUDY ON ROLE OF TELEMEDICINE DURING COVID-19 PANDEMIC AND IMPACT ON HEALTHCARE PROVIDER

Telemedicine is the distribution of health-related services and information via electronic information and telecommunication technologies. It allows long-distance patient and clinician contact, care, advice, reminders, education, intervention, monitoring, and remote admissions.

Author- Nigam Rashmi Dhar

Objectives- To identify future perspective about telemedicine among doctors. To identify issues and feedback of telemedicine by the doctors.

What are the views of doctors regarding telemedicine after the covid-19 pandemic and problems faced by doctors if they have experience or have any feedback for future of telemedicine?

This study is based on the data collected in year 2021 through google form from different doctors.

Methodology- A observational retrospective cohort study is conducted on basis of primary data from various doctors of India using google form. The data that is collected after having consent from the doctors and does not have any sensitive data. A self-made questionnaire data is collected to study and analysis of multiple challenges coming to doctors who have experience in telemedicine.

Study Design: Cross-sectional Observational Study

Setting: Doctors of India

Inclusion criteria: Healthcare Providers.

Exclusion criteria: Non medicos, not practicing doctors.

Sample technique: Convenience sampling

Duration of Study: 22/03/2021 – 19/06/2021

Sample Size: 111 doctors

Ethical Considerations: Before proceeding for data collection, informed consent will be briefed and the doctors will be informed about the use of data and for maintaining the privacy of the doctors and maintaining anonymity, the data like name, email and practice location will not be recorded.

Analysis- This primary observational study from different doctors showed that slowly doctors are getting more inclined towards telemedicine. And doctors too feel that patients are preferring more teleconsultation due to pandemic and other usefulness of telemedicine.

Conclusion- Sample collected is 111, out of which 3 are exclusions as those response is not from doctors.

From the above data we can analyse that almost doctors have heard about telemedicine that is 90.7%, 45.37% doctors have given tele consultation, 67.59% think that patients are adapting with telemedicine which is a good sign for future perspective.

Some of the reasons behind doctors not preferring telemedicine is that they lack vital monitoring device and second to that is need of medical personnel as an assistant with patient.

Also, it can be seen from the data analysis that maximum doctors feel that telemedicine can increase that reach to remote places with healthcare facilities and telemedicine is good option in follow-up patients.

Keywords- Telemedicine, Covid-19, Doctors feedback on telemedicine, Impact of covid-19 about telemedicine.

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1.1 INTRODUCTION

Telemedicine is a service that is rapidly evolving to provide greater access to high-quality health-care services that are efficient and cost-effective, especially in the midst of the current COVID-19 pandemic. As per the Centres for Medicare and Medicaid Services (CMS), telemedicine is the "arrangement of administrations that mean to improve a patient's wellbeing through the arrangement of two-way intuitive, ongoing correspondence between the patient and the specialist, in a far off place." disregarding this likeness, the ideas of telemedicine " and "telehealth" and ought not be utilized conversely. Telemedicine, "which implies the utilization of broadcast communications and data innovation (IT) to give admittance to wellbeing evaluation, finding, mediation, meeting, perception, and the subtleties of the separation from" and, Consequently, telemedicine, and can be considered as a more extensive idea of telemedicine, which includes the utilization of new advancements, to gather and send patient information, for example, phone numbers, email, and far off tolerant observing gadgets (REVOLUTIONS each moment), to give the best clinical schooling or extra medical care administrations. During recent many years, enhancements in innovation have significantly expanded the openness and the nature of the carefully accessible to the wellbeing and social consideration.

The two most urgent contemplations in the current circumstance are the nature of the telemedicine administration conveyed and its security. A portion of the endeavours to advance telemedicine during the pandemic seems to accept a that a sizeable extent of outpatient visits can be overseen viably distantly, and patients can be triaged to telemedicine administrations without bargaining their wellbeing or the nature of care. It's anything but clear, in any case, regardless of whether this is valid. It is additionally not satisfactory whether the utility of tele-emergency will disseminate, to some degree or altogether, after the pandemic emergency is finished.

Despite this, telemedicine is yet not broadly received, due to the exacting principles of law, and not to the instalment structure. Before the pandemic, medical care suppliers have needed to extend the utilization of telehealth administrations to the detriment of the customary up close and personal experiences with patients. During recent years, scientists have been examining the advantages and downsides of telemedicine to

conventional patient contact. During the current pandemic, telemedicine can enormously expand the capacity to give superior grade and moderate clinical consideration to the patients, and simultaneously as the actual distance, to guarantee the security of the two patients and medical services suppliers. Notwithstanding the virtual visit, an instant message, email, and versatile applications, just as a convenient gadget, the data can be utilized to divide data among specialists and patients. In this article, we will examine about the advancement of telemedicine in the scene, and its utilization in the current pandemic, we expect that the procedure will be executed to the post-pandemic world.

Confronting the worldwide wellbeing emergency of COVID-19, wellbeing frameworks are progressively supporting the utilization of telemedicine in wandering consideration settings. It's anything but evident whether the expanded utilization of telemedicine will endure after the pandemic has settled. The points of this investigation were to evaluate the utilization of telemedicine by Israeli paediatricians previously and during the main lockdown period of the pandemic, and to clarify how they predict telemedicine as a mechanism of clinical practice in the post-pandemic time.

1.2 BACKGROUND OF TELEMEDICINE

The origins of telemedicine followed back to use by old images of the and-rolls to the to the sharing of wellbeing data regarding the occasions of the flare-up or scourge. In Addition, a few nations have been known to utilize the alarm to caution the precious ones of the town of illness. In the nineteenth century, the making of the phone changed how clinical data is traded between the patients and the specialists. During the common conflict, the message, used to move data from one of the people in question, and to the calling of medication. Utilizing your telephone while in the republic of Korea and the Vietnam War, to send a clinical group. A 5-In the 1950's, the advancement of the television, begun, and, in 1959, the Nebraska Psychiatric Institute started in the utilization of telepsychiatry for video conferencing.

The National Aeronautics and Space Administration (NASA) also played an important role in the development of telemedicine, as we know it today. The requirement for

clinical consideration while going in profound space, which permits the specialist to screen the existence of the markers of a space traveller on the flight, yet in addition to complete the flight, conclusion, and treatment. Likewise, NASA will assist with guaranteeing that telemedicine in the provincial spaces of states like Minnesota, New Hampshire, Maine, Alaska, Arizona, and Washington, dc, during the 1970s and 1980s. This was essential for a governmentally subsidized undertaking intended to recognize and redesign the limit of the telemedicine hardware, and the clinical utilization of telehealth as a help. During the 1990s, the Internet has changed the method of telemedicine administrations, which are being utilized. The Internet, which has essentially improved the trading of clinical pictures, like x-beams or outputs of a bunch of indispensable signs, ECG, and sound and video continuously.

These days, with the improvement of versatile and electronic types of the innovation, telemedicine has gotten more open than any time in recent memory. As indicated by a 2019 report by the Pew Research Centre, out of 90% of Americans utilize the Internet. What's more, 81% of Americans utilize their cell phone to 75% with the utilization of a work area or PC, about half with the utilization of a tablet pc, or cell phones. That the extension of versatile innovation, the limit is vital for the advancement of telemedicine. In this manner, the utilization of the Internet is as of now the fundamental focal point of the medical care framework.

The utilization of the electronic clinical records permits you to store and get clinical data for the two patients and medical care suppliers. With the patient in the assistance, as you can find in the outcomes, top off, drug conveyance, and send the message straightforwardly to your primary care physician's recommendation. What's more, we currently have the chance to interface up close and personal with providers continuously by means of a live video transfer, which is otherwise called a simultaneous telemedicine. We can impart it to the visuals, research centre tests, or of the examination, so they can be partaken in the remarks, at a later period, known as the Storage and correspondence, or nonconcurrent telemedicine. We have, at long last, the utilization of telemedicine, estimating gadgets, like cameras, cell phones, computerized stethoscopes, ophthalmoscopes, otoscopes telemedicine, preceding the COVID-19

The utilization of telemedicine in the US is developing quickly. From 2010 to 2017, the portion of U.S. emergency clinics, to speak with the patient, with the utilization of video

and other innovation to increment by 35% to 76%. The American Medical Association, He noticed that the cases and advantages of telemedicine, up 53% from 2016 to 2017. This is presumably because of the expanding of the viability of telemedicine for the day permit specialists to offer their types of assistance, indeed.

The utilization of telemedicine can be separated severally, for instance, of uncommon legitimacy, or the expert treatment. For instance, in the specific Telemedicine Service Telethon has gotten probably the biggest supplier of clinical consideration gave to stroke patients in the US since the beginning of the 1999.¹⁰ When considering the utilization of telehealth with an assortment of fortes, it was shown that a portion of the clinical claims to fame, the utilization of telemedicine for additional. The analysts tracked down that the roentgenologic, specialists and cardiologists frequently, the utilization of telemedicine, and from 39.5%, with 27.8% and 24.1%, individually. Most of experts who don't utilize the telemedicine are allergists/immunologists, gastroenterologists, and oncologists, and gynaecologists (6.1%, 7.9%, and 9.3%).

Despite the expanding utilization of telemedicine administrations, and the legitimate and administrative difficulties that impede, their proceeded with development. The workplace of the unified countries office of the great official for Human Rights records the six fundamental elements of the right to wellbeing: access, investment, responsibility, consistency, and quality. Medicaid considers telemedicine is a worthy option in contrast to the conventional vis-à-vis experience with the patient, yet in the last mentioned, the laws and decides that administer the five most significant components of the policy management is person.

Presently, the telemedicine laws, guidelines, rules, and guidelines in each of the 50 states and in Washington, which is fundamentally extraordinary. Explicit lawful issues in regions like protection strategy, authorizing, accreditation, on-line endorsing of medications, clinical negligence, security, and security misrepresentation, and misuse, to decide the manners by which providers can offer an extraordinary tele-medication administration. Albeit numerous States utilize comparative expressions in their arrangements, there are outstanding contrasts, which establishes a mistaking climate for telemedicine members.

Even though there are contrasts in the approaches of the vague, the discussion among US, and all things considered, each state characterizes its own Medicaid strategies, boundaries, a few patterns can be noticed. For instance, in 2020, the Medicaid expense for-administration programs offer some type of live-video, the instalment in every one of the 50 states just as Washington, DC.¹³ and 16, state Medicaid programs, the instalment for the capacity and transportation administrations with just 23 states have the commitment to pay for the RPM of the administrations and of the 10 are needed to pay for each of the three, with some restrictions.¹³ of the Laws and guidelines overseeing the instalment of private telemedicine administrations, which are in power in 42 states and Washington, dc

The motivation behind research concentrate on post Coronavirus sway about telemedicine among specialists of India is to get knowledge just as to recognize future point of view about telemedicine among specialists and to distinguish issues and input of telemedicine by the specialists.

I feel know became we are in Coronavirus time where visit medical clinic isn't fitting except if genuine disease. Likewise, India with an enormous populace will be hard to deal with the patient if not found a way way to execute and make an act of telemedicine among individuals.

So, keeping in vision the point is to comprehend the perspectives on specialists regarding telemedicine after the Coronavirus pandemic and issues looked by specialists if they have insight or have any criticism for eventual fate of telemedicine.

Furthermore, the goal is to get familiar with the mentality of specialist for development required in the present telemedicine framework and approaches to improve it so it very well may be acknowledged both by specialists and the patients.

2. REVIEW OF LITERATURE

S L N O	STUDY	AUTHOR	YE AR	STUD Y LOCA TION	SAM PLE SIZE	SAMPLING TECHNIQU E	SALIENT FEATURE
1	Demand for Telemed icine to Rise Post Covid- 19: Survey	HEALTHW ORLD	202 0	NEW DELHI	3000	SURVEY	77% PEOPLE RESPONDED POSTIVITELY FOR TELE CONSULTATI ON
2	Covid- 19 lockdow n 2.0: telemedi cine in India to see continue d growth	RASHMI BABIYAN	202 0	NEW DELHI	-	OBSERVAT IONAL INTERVIE W	CUSTOMER GROWTH IN DIGITAL PLATFORM LIKE PRACTO
3	How much has COVID- 19	<u>Prabhaker</u> <u>Mishra</u> , <u>Najmul</u> <u>Huda</u>	202 0	INDIA	533	ONLINE SURVEY	REDUCED IN OPD PATIENT, PATIENT MAY BE

	Pandemic Affected Indian Orthopedic Practice						NEEDING TELECONSULTATION
4	Telemedicine in India: A tool for transforming health care in the era of COVID-19 pandemic	<u>Neema Agarwal, Payal Jain,Rambh a Pathak,Rak esh Gupta</u>	2020	INDIA	-	ARTICLES	TELEMEDICINE WILL GROW AND WILL BE ADOPTED BY HEALTH CARE PRACTITIONER IN FUTURE
5	Telemedicine during COVID-19: Benefits, limitations, burdens, adaptation	<u>Bill Siwicki</u>	2020	USA	-	ARTICLE	Telemedicine is making a very positive contribution but have certain limitations when it comes to treating patients during a pandemic.

	n						
6	How Physicians evolved into Digital Doctors during the COVID 19 pandemic	Monica Gangwani	2020	INDIA	-	SURVEY	IT TOOK MUCH SLOW PACE AS PRACTICE OF TELEMEDICINE IS LESS IN INDIA
7	Telemedicine and Neurological Practice in the COVID-19 Era	<u>Krishnan</u> <u>Ganapathy</u>	2020	TAMIL NADU	-	ARTICLE REVIEW	With possible reduction in face-to-face consultations, remote evaluation may become mainstream

8	India Telemedicine Markets, 2020- 2025 - Leverage the COVID- 19 Phase to Ramp- Up Telemedicine Infrastructure, Especially in States with High Growth	Research and Market	2020	Dublin	-	Primary Research	Much need of telemedicine infrastructure in India
9	Younger and female doctors adopted telemedicine more during Covid in India, study	<u>Simrin</u> <u>Sirur</u>	2020	NEW DELHI	2116	RESEARCH STUDY	A significant shift from physical in- clinic visits to telemedicine

	says						
10	The role of telehealth during COVID-19 outbreak : a systematic review based on current evidence	Elham Monaghesh, Alireza Hajizadeh	2020	IRAQ	5	DATABASE RESEARCH	Telehealth should be an important tool in caring services while keeping patients and health providers safe during COVID-19 outbreak.
11	The Impact of the COVID-19 Pandemic on Outpatient Visits: A Rebound Emerges	<u>Ateev Mehrotra</u>	2020	ISRAEL	1600	RESEARCH STUDY	Opd flow is decreasing need for teleconsultation

1 2	Lockdown or no lockdown, telemedicine is here to stay, say doctors	Sohini Das	2020	MUMBAI	-	STUDY INTERVIEW	Clinicians feel that telemedicine consultations with patients is here to stay for the longer haul
1 3	Transforming Indian healthcare via telemedicine	Akanki Sharma	2020	NEW DELHI	7	STUDY INTERVIEW	Telemedicine will revolutionise the Indian healthcare system in the days to come, especially in keeping the with current health crisis due to the COVID-19 epidemic
1 4	Tele-medicine : A New Normal Future In India	Amlegals	2020	INDIA	-	Observational survey	Boost will be in telemedicine sector in the post-COVID scenario.
1 5	Are medical consultations	<u>Pratishtha Nangia</u>	2020	INDIA	-	Interview study	Tele consultations will still be

	ions via digital means likely to stay post COVID-19 pandemic as well?						higher than what it was during pre-COVID levels.
16	The Role of Telemedicine and Tele-Education During and Beyond the Pandemic	Divyansh Sharma, Sonu Bhaskar	2020	INDIA	-	Articles review	Telemedicine or remote education platforms can minimize increased mental health risks to this population
17	Telemedicine: a new normal in COVID era; perspective from	Nipun Malhotra, Pirabhu Sakthibel, Nitesh Gupta, Neeraj Nischal, Pranav Ish	2020	NEW DELHI	-	Article study	Telemedicine should be the new normal for the present and for all times to come.

	a developi ng nation						
1 8	The future of telemedi cine visits after COVID- 19: percepti ons of primary care pediatric ians	<u>Gabriel</u> <u>Chodick</u> , <u>Stephen M.</u> <u>Reingold</u> , <u>Gil</u> <u>Chapnick</u> , <u>Shai</u> <u>Ashkenazi</u>	202 0	Argenti na	169	Web based survey	Use of telemedicine technologies by primary care pediatricians increased substantially during the first COVID-19 lockdown
1 9	Telemed icine: Embraci ng virtual care during COVID- 19 pandemi c	<u>Suneela</u> <u>Garg</u> , <u>Navya</u> <u>Gangadhara</u> <u>n</u> , <u>Nidhi</u> <u>Bhatnagar</u> , <u>MM Singh</u> , <u>SK Raina</u> , <u>Sagar</u> <u>Galwankar</u>	202 0	INDIA	-	Article study	This pandemic has paved light on the importance of telemedicine in service delivery and how it is going to be accepted in future
2 0	Impact of	<u>Shashank</u> <u>Bhargava</u> ¹ ,	202 0	Madhya Pradesh	260	Primary research	Telemedicine platforms hold

	COVID-19 pandemic on dermatology practice in India	<u>Rashmi Sarkar</u> ²		, New Delhi			great promise to improve access to high-quality care in the future
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3. METHODOLOGY

STUDY DESIGN: Cross-sectional Observational Study

Inclusion criteria: Healthcare providers (Doctors practicing in hospitals, clinic, individual practice).

Exclusion criteria: Non medicos, not practicing doctors.

Study tools: Self Designed Questionnaire

DURATION OF STUDY: 22/03/2021 – 19/06/2021

SAMPLE SIZE: 100-110 doctors

SAMPLING TECHNIQUE: Census Sampling

DATA COLLECTION PROCEDURE: Primary data collection by “questionnaire”

DATA ANALYSIS PLAN: Microsoft Excel 365 would be used for data analysis of the responses recorded from the questionnaire.

ETHICAL CONSIDERATIONS: Before proceeding for data collection, informed consent will be briefed and the doctors will be informed about the use of data and for

maintaining the privacy of the doctors and maintaining anonymity, the data like name, email and practice location will not be recorded.

Understanding the key research question that is to identify future perspective about telemedicine among doctors and to identify issues and feedback of telemedicine by the doctors.

Research question is designed by self-questionnaire and primary collection is done among doctors of India.

Consent was taken from the participants.

Sample collection was done from 111, out of which 108 are doctors and 3 are not doctor. So, inclusion is 108 and exclusion is 3.

Data analysis in Microsoft excel and pie chart. And observational retrospective cohort study is done and reached to the conclusion result.

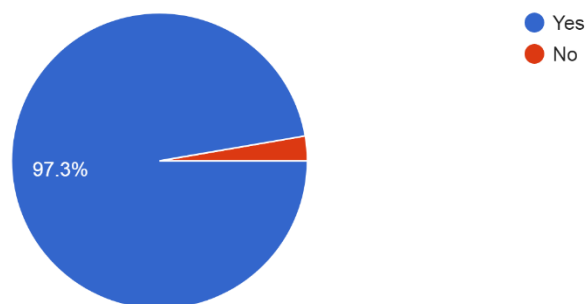
Questionnaire includes:

1. ARE YOU A DOCTOR?
2. HAVE YOU HEARD ABOUT TELEMEDICINE?
3. HAVE YOU GOT AN EXPOSURE TO TELEMEDICINE?
4. CURRENTLY ARE YOU A PRACTICING DOCTOR?
5. WHICH METHOD YOU PREFER TO PRACTICE MORE?
6. WHICH CONSULTATION DO YOU FEEL PATIENT IS MORE COMFORTABLE WITH DOCTOR AFTER COVID 19?
7. AFTER THE END OF COVID WILL YOU PREFER TELEMEDICINE CONSULTATION?
8. DO YOU THINK PATIENT ARE ADAPTING WITH TELECONSULTATION?
9. WHAT PERCENTAGE OF DISEASE CAN BE MANAGED USING TELEMEDICINE OVER PHYSICAL CONSULTATION?
10. WHAT ISSUE DID YOU FACE THE MOST DURING TELECONSULTATION?
11. WHICH SCENARIO DO YOU THINK TELEMEDICINE IS MOST APPLICABLE?

12. WHICH FEATURE OF TELEMEDICINE YOU LIKED THE MOST?
13. WHICH FEATURE OF TELEMEDICINE YOU DISLIKE THE MOST?
14. WHICH FEATURE IN TELEMEDICINE DO YOU FEEL NEED TO BE ADDED?
15. BEING A DOCTOR WHATS YOUR PERCEPTION ABOUT TELEMEDICINE?

5. RESULTS

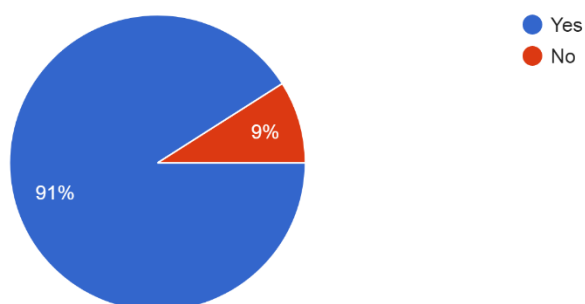
ARE YOU A DOCTOR?
111 responses



Sample taken 97.3% (108) are doctors

HAVE YOU HEARD ABOUT TELEMEDICINE?

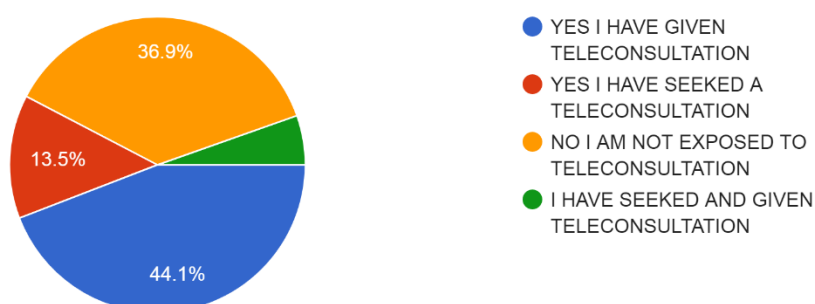
111 responses



91% have awareness of telemedicine

HAVE YOU GOT AN EXPOSURE TO TELEMEDICINE?

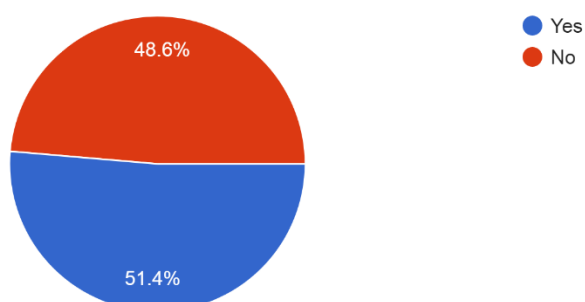
111 responses



44.1% have given tele consultation

CURRENTLY ARE YOU A PRACTICING DOCTOR?

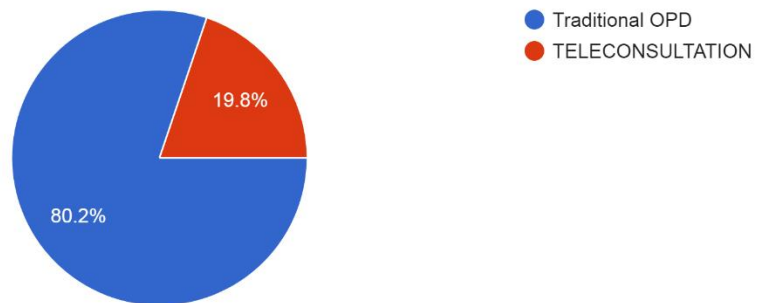
111 responses



51.4% out of sample are practicing doctors

WHICH METHOD YOU PREFER TO PRACTICE MORE?

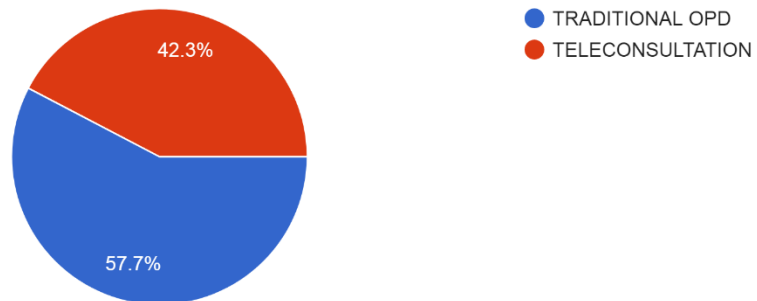
111 responses



Sample are practicing traditional method more

WHICH CONSULTATION DO YOU FEEL PATIENT IS MORE COMFORTABLE WITH DOCTOR AFTER COVID 19?

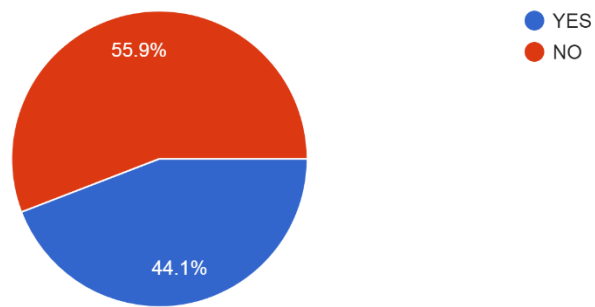
111 responses



57.7% of sample believe that traditional opd may continue

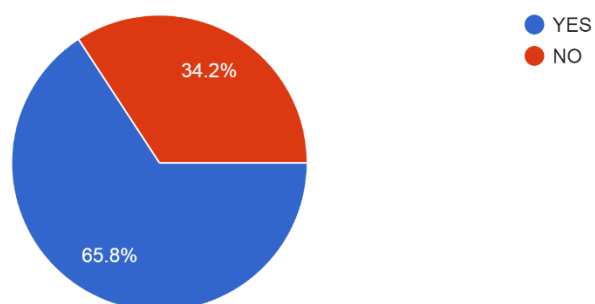
AFTER THE END OF COVID WILL YOU PREFER TELEMEDICINE CONSULTATION?

111 responses



DO YOU THINK PATIENT ARE ADAPTING WITH TELECONSULTATION?

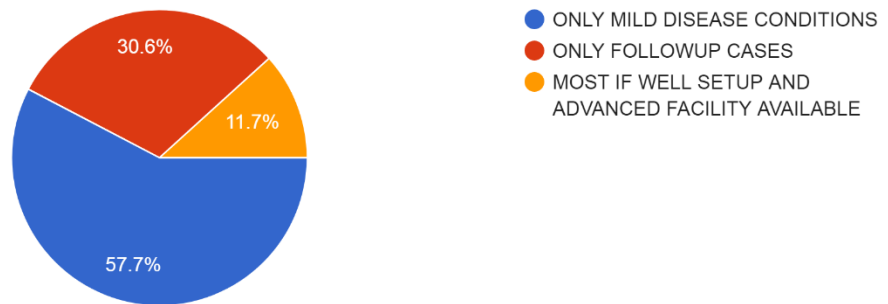
111 responses



About 65.8% of sample believe that patients adapting to telemedicine

WHAT PERCENTAGE OF DISEASE CAN BE MANAGED USING TELEMEDICINE OVER PHYSICAL CONSULTATION?

111 responses



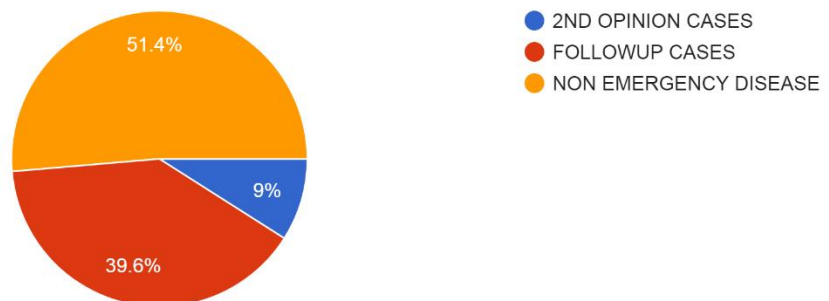
WHAT ISSUE DID YOU FACE THE MOST DURING TELECONSULTATION?

111 responses



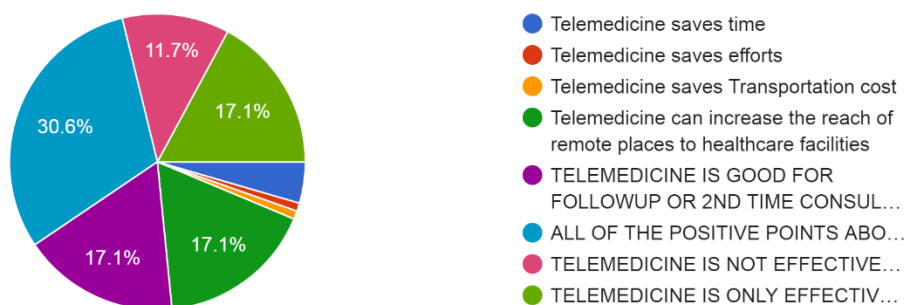
WHICH SCENARIO DO YOU THINK TELEMEDICINE IS MOST APPLICABLE?

111 responses



BEING A DOCTOR WHATS YOUR PERCEPTION ABOUT TELEMEDICINE?

111 responses



Interesting answers of three open end feedback questions are:

1. WHICH FEATURE OF TELEMEDICINE YOU LIKED THE MOST?

Availability

Patient friendly

Nothing

Video call

Its reach to the remote areas.

Attending and responding to the all need of patients

Not getting assaulted

Patients can't beat doctor

During covid its safe for patient and doctor

Not being exposed to covid and yet practicing medicine

It's easy to communicate whenever needed

Easy access

Patient can't do assault on doctors

follow up

Better to consult a doctor rather than googling symptoms and panicking unnecessarily

Safety of doctors

Can contact the health professional immediately during their unease.

Safety of doctor

Ability to get specialist opinion

Minimal risk to frontline health workers, more convenient and accessible

available of doctors on any time
 Getting treatment from where we are.
 Advice to patient which saves the lives
 Two-way conversation without the hassle of getting out of comfort zone
 Won't get physical harm
 I can handle more patients, zero patient waiting lines
 Can be consulted from the patient's residence and avoiding the travel and preventing the exposure to COVID for both doctor and patient
 No need to rush to the hospital in this covid-19.
 Easy accessibility
 Cost effective
 Treatment can be given any time in this covid lockdown and reduces patients' sufferings
 Can be easily follow up
 Comfortable
 No contact with patient
 2nd opinion
 Safety of us doctors from patient attendees
 Patient and doctor safety
 Delivery of medicine and home sample collection
 Can consult just by sitting at home.
 There will be no contamination prevent spread of disease
 At least u won't get beaten up
 Easy accessibility for patients for follow-up case
 Can prevent Covid19 exposure
 Decrease travel time
 Time saving
 Main social Distance
 Get an appointment easily
 It saves the time
 can guide if direct doctor consultancy is needed or not. it helps to reduce the opd burden on limited no of doctors. and can replace non trained professionals like ramps in village.
 Can give a piece of advice from any place
 Follow up cases
 Patients telling everything without hesitation

Reachability

Time saving and economical

Prevents exposure

Helps patient nearly solve his problem without stepping out of his home

Patient cannot harm the doctor

Long distance patient consultation

Safety to doctors

You can work sitting at home

Convenient for patient

In These pandemic times, telemedicine helped patients to stay home n fulfil their medical requirements, worry less about exposure to covid during op visits

It's easy and super affordable to all patients with a proper help and guidance

Service at patient's comfort

The fear to overcome that We can't be beaten up by patients

Telemedicine serving people of remote places efficiently

You can manage patient

Saves time

People need not go to hospital for mild issues

Audio and video consultations

Electronic records

This way we can communicate with remote areas which lack proper medical setup &

No fear of physical abuse on doctors

Patient counselling

Physical violence against doctors is not there in teleconsultation

Easy availability

Doctors available at the time of need when we can't go out to hospital but there is need of doctor's consultation in not so serious cases

Doctors will be safe for sure!

Distancing

Fixed time

Patient can stay in their home or any other comfortable places

Reports can be seen conveniently

2. WHICH FEATURE OF TELEMEDICINE YOU DISLIKE THE MOST?

Lack of physical examination

Cannot examine the patient

No examination

Network issue

As some patients has already completed their medication more than a month, they are getting continuous calls from 104 and they feel irritated and showing dis respect in the way of speaking to us. If u remove their phone number from the list after completing treatment, It will be good for both patient and doctor and will feel bad if hear such rude behaviour of patients because we are calling for their good but they won't have such mind to think

We can't assess the patient...only by treating according to their symptoms what they say...The symptoms what patients saw as most important will not be their actual ones and it may worsen the condition of the patient. According to me telemedicine is like a floating iceberg

No examination

Cannot examine the patient

Lack of physical examination

Network issues

Network issue

No vitals monitoring & examination

Yet to see one

Not able to physically examine a patient which is required in most cases

Availability

Patient don't comply with app.

Its time taking when your patient load is higher.

I don't know

Clinical correlation not possible

Audio

Insufficient examination

No

No healing touch, lower observation, cannot perform examination

Lame doubts of patients which is time consuming

Private hiring

Doctors tend to be available 24*7 to respond to continuous queries by patients.

Not able to examine patient

unable to have a look at the patient

Brokers

Not able to examine the patient

we can't confidently diagnose a disease unless we do physical examination.

At times, Patient doesn't respect the consultation hours

When few patients request the doctor for a conference call with some other person who is also sick

Unable to examine the patient physically

Improper reports or improper vital monitoring

Free consultation

PractO

Everything other than smashing the doc

Nothing

Always seeing my movie phone

Lacks examination part

Completely depend on patients' words only and no other way of examination

network issues...

Unable to do physical check-up

Can't examine the patient properly

Physical examination is absent

Our learning materials

Negligent patient, patient not really taking advise and calling just for the heck of it
Unable to Physically examine the patient, unable to understand patient issues and
give the best for them

It's depended on situations &conditions.

No Clinical examination

Can't examine the patient

Not knowing about the vitals

Proper training

Disturbance of network

No monitoring device available with patients

Unable to do physical examination of patients.

False diagnosis

We don't see the patient.

Repeated contacting

Nil

As sum patients has already completed their medication more than a month are
getting continuous calls from 104 n thy feel irritated and showing dis respect in the
way of speaking to us. If u remove their phone number from the list after completing
treatment, it will be good for both patient n doctor n v feel bad if hear such rude
behaviour of patients because we are calling for their good but they won't have such
mind to think

Checking vital signs, patient awareness

Network Issue

Technical glitches

Spams

Vitals monitoring

Can't assess completely, communication gap n misunderstanding

No face to face communication

Prescription

Lack of proper guidance to the patient

No clinical examination

Covid19

I don't know

Because of this we must connect with the network. Mostly we face the network issue.

We can't assess the patient...only by treating according to their symptoms what they say...The symptoms what patients saw as most important will not be their actual ones and it may worsen the condition of the patient. According to me telemedicine is like a floating iceberg

Not able to do physical examination

Limitations of physical examination

Patients are sometimes careless

I don't like telemedicine itself.

Lack of vital data.

Services can't be fully covered to patient

Lack of communication

Can't give proper time to every patient

Can't do complete clinical examination, lack of proper history.

Network dependant

Lack of physical examination

queen

Lack of physical examination.

Network

can't see the patient and most of clinical diagnosis missing

Can't do general physical examination and systemic examination

Patient's trust

Time taking

Can't observe patients directly! Had to rely only on patients' subjective complaints and reports.

Making a long wait to get response

I cannot see the px. and note for other illness compounding to their illness.

No proper clinical examination

May be the network issues

Patient examination cannot be done properly

Direct interaction

Video

Just based on compliments we can't give medication we need to examine we need basic data of present vitals

3. WHICH FEATURE IN TELEMEDICINE DO YOU FEEL NEED TO BE ADDED?

Not quite sure, I guess it needs to reach a wide range of population before we could conclude something

Nothing specific

Easy to be available for patients even when opd is down for non-emergency cases

Nothing need to be added.

I don't know

Add anm and asha to assist the discussion at the patient's place

No comments

Vitals monitoring and all possible examinations along access to patient's older medical records

No

Many

Making the patient appear on time

A proper assurance to the doctor, as most of the video calls are fake sometimes

Proper platform

A fixed time/slot. Not extending beyond work hours.

Paramedic with patient

monitoring vitals

Multispeciality setup

Nothing beyond this can be done

booking appointment after tele consultancy or direct referral to a super speciality if needed for guidance and record of the video or call. and written online prescription with a patient id which can help another doctor find patients history easily with most patients forget or feel not important to tell.

DISCREPANCY BETWEEN THE PARTIES

Well framed .no additions required

Recording of the consultation

Doctor can see live reports

Physical examination can't be done

No need

Videoconferencing

Many things.

More focus

Assistant if available next to the patient will be better

Not sure

Some way to check for vitals

I don't know

All should have proper facilities for telemedicine

More awareness

Can't do

As I haven't done one. I can't add on.

With time I think apps will do a better job than just over calls, patient details must be registered under a specific profile or something like that

Proper prescribing pattern, educating doctors more about what and how they are prescribing, avoiding irrational prescription of antibiotics, giving good time to the patient, proper medication and patient counselling

Patients observation, data collection, and history of medical records.

An official Portal to check onto investigations & scans of patients

Medical personals with patient

Good money

Interlinking

Vitals monitoring

App should work offline

Monitoring device

Approach and availability

Well-equipped setups

Nothing.

Time maintaining

Nil

Multiple video call at one time

Teach d patients how to talk on how to go respect to DOCTORS (ONLY SUM CALLERS, NOT ALL)

Patient awareness and sensitisation

Update app

Rapport

Transportation ease

Once I had telecommunication with chest physician, but she didn't come on time, so I had to cancel appointment so, proper management of app regarding appointment with doctor.

It's not a feature ... but that clinical examination which is crucial is being missed. no feature can replace it.

Unnecessary call

I don't think anything can replace physical consultations

Sharing photos

Covid19

I don't know

Can't tell exactly wat should be added.

Do use this only for follow up cases after a first assessment

Advertisement about telemedicine

Dispensing medicine

Idk

National based server with previous history of the patient and past prescriptions.

Technical training and equipment, sound data solutions for maintaining patient records

rural People made aware about it

Network internet connection should be improved

Cannot practice without a clinic!!!

Non

Proper assistance

driven

Ability to examine patient

AI mediated examination.

Good network and speed

nothing

Vital monitoring

Through video chat consultation

Proper guidance to patients about the telemedicine

Examination

Normal vitals and labs should be taken before the consultation.

Video conference.

Medical assistant standby with the patient

I don't know

Vital sign monitoring system

Vital monitoring technology.

6. DISCUSSION

As from the observational study from different doctors we can get an idea that slowly doctors are getting more inclined towards telemedicine.

Also, it noticed from the data that doctors are more concerned about their safety it may be due to some areas where news are showing patients or patients relative hitting doctors, health workers.

As the pandemic proceeds and develops, it will be imperative to keep on checking the degree of telemedicine use just as assumptions about post-pandemic use levels.

And doctors too feel that patients are preferring more teleconsultation due to pandemic and other usefulness of telemedicine.

7. CONCLUSION

Total primary google form collection is 111 out of which 3 are exclusions as those response is not from doctors.

From the above data we can analyse that almost doctors have heard about telemedicine that is approximately $98/108 = 90.7\%$

Out of data $49/108 = 45.37\%$ doctors have given tele consultation but unfortunately $40/108 = 37.03\%$ have not at all exposed to telemedicine.

Doctors around $73/108 = 67.59\%$ think that patients are adapting with telemedicine which is a good sign for future perspective.

May be some of the reasons behind doctors not preferring telemedicine is that they lack vital monitoring device and second to that is need of medical personnel as an assistant

with patient. If we see in percentage its around $52/108 = 48.14\%$ for the need of vital monitoring device and $27/108 = 25\%$ for the need of assistant for patients.

Most doctors $44/108 = 40.74\%$ from data it can be analysed that telemedicine will be applicable for follow-up cases.

Also, it can be seen from the data analysis that maximum doctors feel that telemedicine can increase that reach to remote places with healthcare facilities and telemedicine is good option in follow-up patients.

And lastly but not the least doctors from the sample taken wanted to have features in telemedicine like:

1. Recording of the consultation
2. Doctors can see live reports
3. Smart artificial based device connected to monitor the vitals
4. National based server with previous history of the patient and past prescriptions.
5. Multispeciality consultation linking in app with laboratory as well as pharmacy reminder.

8. SUGGESTIONS

As after the primary study it can be interpreted and recommended that there is need for more awareness regarding telemedicine among the people. Also need to encourage to do teleconsultation to be safe during this pandemic.

Need for the improving app that is available for teleconsultation incorporating friendly interface that will help both doctors and patients. Also need artificial intelligence-based feature for vital monitoring.

As we may have to live with covid-19 in near future so it's essential that we adapt to teleconsultation ecosystem.

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