



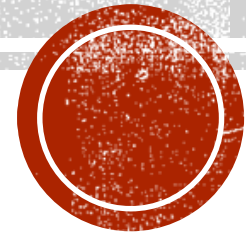
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The Use of Telemedicine During COVID-19 Pandemic

How to Cite This Research Paper :

Elmahgoub Alaa, Elkrghli Sabri (2023), "The Use of Telemedicine During COVID-19 Pandemic", *Faculty Research Volume*, 1(7),pp. 1 -25.



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INTRODUCTION

The public health emergency that resulted from COVID-19 increased public interest and demand for telemedicine worldwide and led to a rapid expansion of this care modality as an integral part of outpatient care delivery. However, to date, the use of telemedicine worldwide remains suboptimal due to a heterogeneity of solutions and differences in the quality of infrastructures and technologies, as well as the level of acceptance of patients and doctors across different countries. With the aim of providing an update of the status and use of different modalities of telemedicine during the COVID-19 pandemic.

DEFINITION OF TELEMEDICINE

Telemedicine allows healthcare providers to evaluate, diagnose and treat patients without the need for an in-person visit. Patients can communicate with physicians from their homes by using their own personal technology " Scott Wallask".

HISTORY OF TELEMEDICINE

A Canadian doctor built upon this technology in the 1950s, constructing a teleradiology system that was used in and around Montreal. As these practices became more widespread, so did motion pictures, and with the advent of modern film technology came serious plans for video medicine.

The first people to use video communication for medical purposes were clinicians at the University of Nebraska. In 1959, the university established a two-way television setup to transmit information to medical students across campus, and five years later linked with a state hospital to perform video consultations.

CONT..

Today, telehealth technology serves many rural communities without local physician access, and this was the basis behind the University of Nebraska's research. In the early 1960s, telemedicine appeared in urban communities as well, touching down in the world of emergency medicine. The University of Miami School of Medicine partnered with the local fire department in 1967 to transmit electrocardiographic rhythms over radio to Jackson Memorial Hospital in rescue situations. Remote medicine had officially hit the streets.

THE IMPORTANCE OF TELEMEDICINE DURING COVID-19 PANDEMIC

During the COVID-19 pandemic, telemedicine has emerged worldwide as an indispensable resource to improve the surveillance of patients, curb the spread of disease, facilitate timely identification and management of ill people, but, most importantly, guarantee the continuity of care of frail patients with multiple chronic diseases.

CONT..

Although during COVID-19 telemedicine has thrived, and its adoption has moved forward in many countries, important gaps still remain. Major issues to be addressed to enable large scale implementation of telemedicine include:

1. establishing adequate policies to legislate telemedicine, license healthcare operators, protect patients' privacy, and implement reimbursement plans
2. creating and disseminating practical guidelines for the routine clinical use of telemedicine in different contexts
3. increasing in the level of integration of telemedicine with traditional healthcare services

TELEMEDICINE VERSUS TELEHEALTH

Two terms came to the fore, often used interchangeably, though they actually mean different things. Telehealth covers the delivery of health-related information for both consumers and healthcare professionals. It's a general term, supporting health care infrastructure, education, and systems management.

Telemedicine is the element of telehealth that relates to clinical care — the contact between patient and doctor. Frequently used for non-critical follow-up visits, telemedicine quickly pushed to the forefront of clinical care with the pandemic to preserve isolation for patients with non-critical care needs.

BENEFITS OF TELEMEDICINE FOR HEALTHCARE PROVIDERS AND PATIENTS

During this global pandemic, telemedicine is emerging as an effective and sustainable solution for precaution, prevention and treatment to stem the spread of COVID-19.

Some benefits for patients include:

- Easy access to specialists.
- Lower cost
- Medical access for people without health insurance.
- Reduced exposure to pathogens.

CONT..

For doctors Include:

- Reduced medical overhead costs.

For doctors, telemedicine helps lower office costs, such as the need for front desk help.

- Insurance reimbursement

Medicare and many private health insurance companies now allow doctors and therapists to bill for telehealth services, no matter where the patient or provider is located.

DISADVANTAGES OF TELEMEDICINE

- Telemedicine doesn't allow doctors to take blood or urine samples. For people with chronic conditions who take medications, this can hamper necessary changes to dosages.
- It also may prolong the time before a new diagnosis is made.
- Doctors can't use a stethoscope to listen to your heart or breathing, take your blood pressure, or take other vitals.
- Doctors also rely on visual assessments, which may be harder to perform virtually.

CONT..

-Children who receive services such as speech therapy may have trouble concentrating or working with their therapists remotely.

-Insurance coverage or reimbursement is not guaranteed and varies from state to state.

PREVIOUS STUDIES REVIEW

In 2020 , in brazil “Higor Leite” , explains how telemedicine and other e-healthcare technologies can benefit people, medical staff and healthcare systems. One of the main challenges for telemedicine in many countries is the lack of regulations. The authors call on policy-makers to facilitate wider implementation of e-healthcare technologies, while considering issues of inclusiveness, privacy and data protection.

PREVIOUS STUDIES REVIEW

Asim Kichloo, 2020 , USA

In this paper authors discuss that have been hit with numerous pandemics, including H1N1, Ebola, SARS-CoV, MERS-CoV, and currently, COVID-19. In the future, it is probable that more novel pandemics will arise. Prior to the current pandemic, issues with regulation and reimbursement have prevented telemedicine from being fully immersed into the healthcare landscape in the USA.

PREVIOUS STUDIES REVIEW

“Vera Knörr”,2022,Germany. In this research authors guideline that the use of telephone and video consultation increased during the pandemic. Regarding the frequency of use, physicians already using telephone/video consultations in March/April 2020 report an increase in such services. General medicine was associated with an increased use of telephone and video consultations than cardiology, gynecology or ENT, and in the case of telephone consultations also compared to pediatrics.

PREVIOUS STUDIES REVIEW

(Bokolo Anthony ,2020) , Norway, This study provides implication on the potentials of consolidating virtual care solutions in the near future towards contributing to integrate digital technologies into healthcare , In this study the search strategy was employed to identify studies relevant to provide answers to the research questions.

PREVIOUS STUDIES REVIEW

“María Alejandra” ,November 2020 , Colombia. In this study they conducted a scoping review through different search strategies in MEDLINE and Google Scholar to identify the available literature reporting data on implementation and usefulness of various modalities of telemedicine during the current pandemic. they summarized the included studies according to field and mode of implementation in a narrative way.

PREVIOUS STUDIES REVIEW

“Ashwin Ramaswamy” ,US ,2020 .This study aimed to determine if patient satisfaction differs between video and in-person visits. Methods: In this retrospective observational cohort study, we analyzed 38,609 Press Ganey patient satisfaction survey outcomes from clinic encounters (620 video visits vs 37,989 in-person visits) at a single-institution, urban, quaternary academic medical center in New York City for patients aged 18 years, from April 1, 2019, to March 31, 2020. Time was categorized as pre–COVID-19 and COVID-19 (before vs after March 4, 2020).

REFLECTION

- Examines ten research papers on the subject as well as details of telemedicine during the COVID-19 pandemic. .The literature concludes that the coronavirus (COVID-19) is not only creating fundamental uncertainties in social, economic, and political paradigms but also redefining the contours of public policy and governance. Policy designs and measures can make a sustainable contribution to disaster management in emergencies, pandemics, etc..one such area being adopted by health systems around the world in response to COVID-19 is telemedicine practice.

IMPLICATION

The current COVID-19 pandemic has pushed health systems round the world to develop associated quickly deploy telemedicine to deal with current challenges. The models developed nowadays have the potential to rework the longer term of healthcare, significantly as telemedicine becomes commonplace care. If equity is formed an integral a part of telemedicine now, it'll facilitate make sure that all will enjoy these innovative technologies moving forward.

CONCLUSION

This practice has been around almost as long as telephones but has become more popular and practical during the COVID-19 pandemic.

Improvements in technology and changes to insurance reimbursement rulings have helped increase the acceptance of telemedicine. Without it, doctors and therapists wouldn't be able to connect with patients as easily, especially during the pandemic.

As telemedicine has become widespread, professionals and patients have grown more comfortable connecting virtually.”
Alina Hvostikova”

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THANK YOU!