

e-ISSN: 2582-5208

International Research Journal of Modernization in Engineering Technology and Science (Peer-Reviewed, Open Access, Fully Refereed International Journal)

Volume:06/Issue:06/April-2024

Impact Factor- 7.868

www.irjmets.com

IMPACT OF TELEMEDICINE ON HEALTHCARE

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DOI : https://www.doi.org/10.56726/IRJMETS52055

ABSTRACT

Telemedicine, the remote delivery of healthcare services using telecommunications technology, has emerged as a transformative force in modern healthcare delivery. This paper aims to provide a comprehensive review of the impact of telemedicine on various aspects of healthcare. Telemedicine represents a promising approach to improving access to quality healthcare, enhancing patient outcomes, and reducing healthcare costs. However, realizing its full potential requires addressing various challenges related to reimbursement, equity, technology, and regulatory frameworks.

Keywords: Healthcare, Technology, Telemedicine, Telecommunication, Quality.

I. INTRODUCTION

Telemedicine has opened up new avenues for individuals to access healthcare services, particularly those in rural or remote areas. A systematic review published in the Journal of Medical Internet Research found that telemedicine interventions resulted in reduced hospital admissions and readmissions, improved chronic disease management, and increased patient satisfaction. Studies have shown that telemedicine can lead to improved patient outcomes. For instance, a systematic review published in the Journal of Medical Internet Research found that telemedicine interventions resulted in reduced hospital admissions and readmissions and readmissions, improved patient outcomes. For instance, a systematic review published in the Journal of Medical Internet Research found that telemedicine interventions resulted in reduced hospital admissions and readmissions, improved chronic disease management, and increased patient satisfaction. Telemedicine offers substantial cost-saving opportunities for healthcare organizations and patients alike. Telemedicine enables remote monitoring of patients with chronic conditions, enabling healthcare providers to monitor their health status and intervene proactively. Telemedicine has also improved convenience for patients by reducing travel time and expenses associated with traditional in-person appointments. Additionally, it has facilitated timely consultations, enabling quicker diagnosis and treatment, thereby potentially reducing healthcare costs and improving patient outcomes. However, challenges such as privacy concerns, technological barriers, and disparities in access to technology still need to be addressed to maximize the potential benefits of telemedicine on healthcare delivery.

II. METHODOLOGY

Research design

This research has been selected on the basis of Descriptive research design. Descriptive research emphasizes an explaining the phenomenon by providing factual and accurate information, but does not discuss the variables responsible for a situation.

Sources of data

Primary Data: Data that has been generated by the researcher, surveys, questionnaire, experiments, specially designed for understanding and solving the research problem at hand.

Secondary data: The main sources of the secondary data are received through the internet websites, magazines. **Sampling method**

Sampling method is convenience sampling.

Convenience sampling involves using respondents who are "convenient" to the researcher.

Population

Population sample is 150 respondents for data collection from the patients in the hospitals.

III. MODELING AND ANALYSIS

Quantitative Analysis: Conducted statistical analysis on relevant variables, such as patient satisfaction scores, cost savings, and the frequency of virtual consultations. Comparing outcomes for patients using telemedicine versus traditional healthcare.

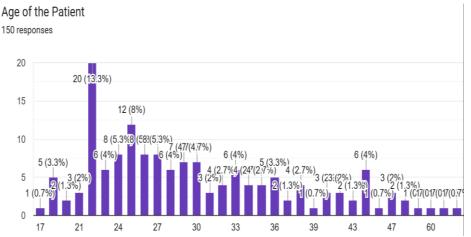


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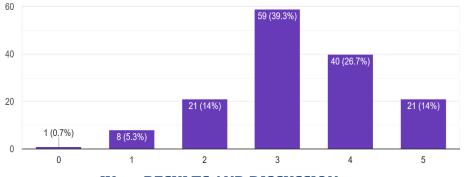


Age of the Patient



Understanding level of telemedicine in healthcare:

How would you rate your level of understanding of telemedicine in healthcare? 150 responses



IV. RESULTS AND DISCUSSION

- **1.** Maximum respondents are from the age group of 21-30 and 40-43.
- 2. Male respondents are more compare to female respondents.
- **3.** Familiarity of patient with telemedicine is around 76.2% from 150 respondents with the answer yes. About 23.8% respondents are not familiar with telemedicine.
- **4.** About 86% of respondents had used telemedicine services before and only 14% of people have not used a telemedicine service.
- **5.** 82% of respondents feel that telemedicine provide the same level of care as in-person visit. 18% respondents feel bad and dissatisfaction.
- **6.** Around 55% of respondents reacted good when they interact with healthcare providers during teleconsultation. And 28.7% reacted excellent consultation.
- **7.** 61.4% respondents feel that their should be use of telrmedicine in healthcare and should improve the use of telemedicine in healthcare.
- **8.** Around 81% of respondents are with answer yes that telemedicine impact patient care and outcomes in healthcare.
- **9.** After COVID-19 pandemic the telemedicine services are increased in use in healthcare sector and 57% respondents agreed to that. Around 27% people are not agreed with the statement.
- **10.** Around 56% of respondents believe that the telemedicine can help address healthcare disparities and improve access to care for remote population.
- **11.** Maximum respondents are aware about the availability of service in their region and about 14% of respondents are not aware of the services.
- **12.** Most of respondents feel that the cost is decreased when patient use telemedicine and both patient and hospitals feels same.



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- **13.** Maximum respondents are concerned about the privacy and security of their medical information during telemedicine consultations.
- 14. 94% of respondents feel that the telemedicine has improved the access to healthcare services.
- **15.** Level of understanding of telemedicine in healthcare is good from the respondents side. The scale rates from 3-4.

V. CONCLUSION

In conclusion, telemedicine presents a promising avenue for improving healthcare accessibility and delivery. However, to fully harness its potential, addressing the identified limitations is crucial. Policymakers should focus on Infrastructure Development like Invest in improving digital infrastructure to bridge the digital divide and ensure equitable access to telemedicine services, Enhanced Privacy Measures like Implement robust security measures and strict privacy regulations to address patient concerns and safeguard sensitive health information, Integration with Physical Healthcare like Encourage the seamless integration of telemedicine with traditional healthcare services to provide a comprehensive and holistic approach to patient care, Standardization of Regulations such as Establish standardized regulations and licensing procedures for telemedicine to create a cohesive framework that fosters interoperability and consistency in service delivery, Education and Training like Provide ongoing education and training for healthcare professionals to enhance their skills in conducting virtual consultations and leveraging telemedicine technologies effectively. By addressing these recommendations, the healthcare industry can further leverage telemedicine to enhance patient care, reduce healthcare costs, and improve overall healthcare outcomes

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