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ROLE OF TECHNOLOGY IN HEALTH CARE

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ABSTRACT

We simplify our lives in the age of the digital revolution; technology is also advancing and innovating. The geographical distance can practically be overcome by these technologies, which also provide better services at lower costs. Accessibility is a key concept in the healthcare sector, both in rural and some metropolitan regions. In order to improve healthcare for people and communities, ICT is essential. With the use of ICT, doctors, patients, hospitals, and laboratories may connect. Additionally, it enhances healthcare research analysis. Artificial intelligence can help to cut down on medical blunders. ICT is essential in the field of healthcare as well. Education can be used to the fullest extent not only by students but also by doctors, nurses, and other healthcare professionals. In this COVID-19 outbreak, telemedicine is crucial. It has the advantage of making it easier and quicker to reach medical patients who are in rural areas. The public can access it and use it from the convenience of their own homes. We can employ video conferencing in telemedicine so that a patient can speak with a doctor who may be thousands of miles distant. This medical invention therefore enhances remote patient monitoring.

KEYWORD: Technology, Healthcare, Doctors, Innovating, Hospitals.

INTRODUCTION

In India today, healthcare is paradoxical. One the one hand, medical travel to India is very popular. Not just in India but throughout the world, it has the top hospitals and doctors. However, for many people who live in poverty or in rural locations far from major cities, access to primary and basic health care remains a pipe dream. It remains difficult to provide everyone with healthcare that is of equally high caliber. One that has formed a cube as a result of two events: a significant increase in the demand for medical care and the total number of people who lack the necessary resources. both in terms of the number of skilled physicians and the availability of handy, contemporary hospitals and medical facilities. In the early 2000s, Indian Health Care entered the Brave New World of ICT to practice telemedicine, just as India's Millennium Development Goals were proclaimed. While the telemedicine satellite approach produced numerous new virtual OPDs. Over the course of the following 15 years, it didn't grow as widespread as anticipated. The price has been one of the major obstacles to it being a complete success. In India, telemedicine depended on satellites, and we depended on satellites. To interface with those satellites, we needed highly expensive tech equipment, and we needed an end-to-end link utilizing the same technology.

Using a simple laptop and free software like Skype that allows video calls without even being present in the ward around, the best doctors are available nearly 24*7 at extremely low cost thanks to free calling applications. Hospitals in India to entirely transition to digital technology through online registration and UHID production, On-call doctors, specialists, nurses, and labs can safely and anonymously access electronic medical records (EMR). a comprehensive hospital information system that transmits up-to-date information about each patient and the facility's resources in real time. MRI, X-ray, CT scan, and other medical pictures can now be shared digitally thanks to India's first packages of image archiving and communication technologies.

Technology plays a key role in healthcare by improving the quality of care, patient experience, and health outcomes:

Patient care

Technology helps healthcare professionals make informed decisions and provide timely interventions by providing access to up-to-date patient information.

Patient experience

Technology helps patients overcome geographical barriers and provides them with convenient access to services and resources.

Quality of care
Technology helps improve the quality of care and patient safety by providing access to evidence- based clinical guidelines and resources.

Efficiency
Technology improves efficiency and productivity by automating routine tasks, streamlining workflows, and reducing paperwork.

Data capture
Technology helps health organizations capture data across the patient care system, which can help them identify issues and enhance care.

Communication
Technology helps improve communication between doctors and patients through email andteleconferencing.

Tracking
Technology helps improve the tracking of patients' health through electronic health records and bar code technology.

Wearable technology
Wearable technology, like heart monitors, helps clinicians evaluate patients' well-being and record symptoms.

Block-chain technology
Block-chain technology helps ensure the integrity of patient records and facilitates secure sharing of health information.

Fitness technology
Fitness technology, like wearable's and apps, helps patients increase their fitness and reduce preventable healthcare costs.

CONCLUSION
In telemedicine the use of electronic communication technologies to share patient data and deliver medical treatments in distant areas is known as telemedicine. Global telemedicine now encompasses much more than just health care services. These days, it is also widely used for data management, research, and education. However, it is paradoxical that telemedicine adoption is still in its infancy, especially in the public health sector, considering India's dominance ininformation technology. Telemedicine has the potential to help provide specialized healthcare to the most isolated areas of the nation with increased efforts. In addition to successfully operationalizing Continuing Medical Education (CME) programmers, telemedicine is projected to offer the benefits of tele-diagnosis, particularly in the fields of cardiology, pathology, dermatology, and radiology.

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