Cyber medicine: A key to unlock the future world.

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Abstract

Cyber medicine is the field that involves the web and developing technologies for providing healthcare services to people. In this article, we will get to know about the benefits of cyber medicine. The origin and developing evidence-based technologies for the development of cyber medicine through internet services being provided to common people. This is the platform that provides basics and knowledgeable information regarding healthcare facilities to people. It helps in comparing among multiple options and provides a fair chance to choose among them. This article will explain the effective changes taking place in healthcare services and undergoing development to provide the best facilities with enhanced, quality services to people.

Keywords: Cyber medicine, Hospital, Treatment, E-health.

Introduction

Dad is positive? Now how we will manage to take him to hospital and manage the proper treatment for him. Mother why are you worrying he is not showing any symptoms and he also don't have any co-morbidities. So doctor has suggested making him quarantine at home and he will give prescription, treatment plan and give consultation online. In this pandemic, health and internet facilities combination is helping to maintain COVID-19 protocols properly. In these difficult time of COVID-19 the immense pressure and the sector which is working hard without any rest is healthcare sector. They are working on providing the best treatment and facilities available to be provided to the patients.

Due to a paucity of beds in this covid-19, e-health or cyber medicine has been extremely helpful in keeping asymptomatic patients under doctor care. This is a moment when everyone is suffering and needs medical help, but patients died due to a lack of monitoring and facilities at a critical period. E-health, often known as cyber medicine, has aided healthcare practitioners in providing assistance to patients. By providing therapy, advice, and care to these individuals, we were able to save countless lives. The delivery of health care services utilizing the Internet as a medium of communication is known as e-health, or cyber medicine. E-health, often known as cyber medicine, is the delivery of health care services using the Internet as a means of communication.

The term "cyber medicine" is used to classify and employ medical applications that can be delivered over the Internet, especially in a collaborative virtual setting. Future improvements in enhancing the application of healthcare services via the internet will be highlighted, and we will look ahead in the future for developments in enhancing the application of healthcare services via the internet.

Definition

Cyber medicine involves the application of health care services using the web as means for communication, it is also known as e-health.

Connecting internet to the medicine

The growth of the Internet since the first 1990s, from a small network to the biggest chain of network connecting the various works in academic and government to a global infrastructure, has immensely affected the delivery of health care. The Internet is a wide network of computers and common platform for the entire globe. Initially used to meet the requirements of the military services in United States of America to the biggest platform which has now broken all barriers and has been effortlessly integrated into the personal life through connecting individuals worldwide by internet.

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The innovation and recreation application to applied science and technology. It has connected the branches of various medical fields from Critical Care Medicine, pathology specimens and digital radiology images which is helping the health care medicine practitioners to provide detailed medical reports of the patients. The Internet has become part of day to day lives of today's generation. By being ordering the day to day needs, fashion statements to the healthcare equipment's and seeking help for healthcare facilities through internet while being at home. This has increasingly proved useful for medical health care facilities as well as the patients. This review article will take you in the sneak peek in the world of Internet connecting with the health care services when applied for providing healthcare facilities to the patients worldwide through medical web sites on the internet. In order to provide the best healthcare facilities a nutshell view of the powerful and magical world of internet.

The health care industry for development is has been linking previously contrasting computer databases and patient management applications together via the Internet through the complex process. By adopting various Internet-ready technologies, like hand-held computers, Web cameras, decision-support and voice-recognition software, and wireless-transmission technology in healthcare services for increasing its efficiency. It is also creating hope for a common ground for patient-clinician partnerships as well as allow for providing more efficient management of health-related information [1,2].

Characteristics of cyber medicine

These are the some of the points by which we have characterized the cyber medicine/e-health. Nowadays the way cyber medicine is helping us by providing the healthcare facilities at our doorstep. The modernized and developing techniques to be provided to the local people with help of wide range of network.

The combination of internet and medicine together best characterize what e-health/cyber medicine is:

- E Enhancing quality
- H Highly knowledgeable
- E –Empowerment
- A Accessible
- L Life saving
- T Transparency
- H –Highly ethical

Enhancing quality

Providing enhancing quality of care and increased efficiency not only involves reduced costs but at the same time improving quality. E-health enhances the quality of healthcare. There is comparison between different healthcare providers for involving consumers by offering different healthcare facilities. It is providing a fair chance to all the consumers to provide wide range of product with enhanced quality and mentioning its specifications. It helps in giving additional power for quality assurance and patient directing streams to best quality providers. By providing enhancing quality with developing techniques will provide a wide range of treatment and home exercise programs for the patient directed treatment.

Highly- knowledgeable

The detailed information is being provided on internet enabling the benefits to health care establishments and the users in standardized way through communication and information exchange. It helps in going through lots of study materials, description of the medical terms and its related terms to be understood. It is the best platform for searching and posting the research work and articles. By posting the ongoing researches and the progression of the healthcare facilities, the healthcare officials as well as the users can look after. It is giving is the tour of new inventions of techniques and technology on our fingertips. It is helping people to understand their treatment techniques and the procedures closely. It is also helping in providing the improvements and developments in particular diseases or procedures to be available to worldwide users.

Empowerment

Empowerment of healthcare professionals and patients by making the knowledge and bases of medicine available. It is also being useful for personal health analysis records accessible to consumers over the Internet. E-health opens new room for patient-centered medicine, enabling the evidencebased results for patients. The internet is giving us the basic idea of the treatment. Encouraging it to be patient friendly platform for better understanding. E-Health is a cost-effective service for the patients who are deprived of treatment because of costing. On the other hand, it is efficient way of providing health care to patients who would have been excluded or are untreated. Remote surgery is an application of interest. Using a Web camera, a live transmission can be sent from the operating room, where the patient could be guided from the office of a specialist to another location. The specialist may guide the on-site surgeon throughout the procedure for proper treatment.

Accessible

Extending the scope of providing health care facilities beyond its limited boundaries. This is the most productive facility for the people living in rural areas, seeking for the best healthcare facilities. Due to being accessible everywhere irrespective of geographical location, it is helping the healthcare workers to get best guidance in emergency situations on time. This can be beneficial in both geographical as well as in a conceptual prospect. E-health enables consumers to easily obtain health services online from global providers as well as domestic. These services can range from simple advice to more complex interventions, suggestions and products including the field of pharmaceuticals. Enabling us to get the best health care advice on one click. It is being used from providing medical consultations to receiving a diagnosis, treatment plan, and drug prescriptions for relatively simple disorders without face- to-face meetings. The regular check-ups for the pregnant women, geriatric patients can be done easily [3].

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Life-saving

Medical facility is something in which person can live or die in just a nick of time in serious conditions like heart attack etc. So some prevention method till the patient get proper medical facility can be life-saving. The proper guidance which can be provided across the globe can be life-saving for the complicated surgeries. Computer-based technologies like decision-support software, videoconferencing are being used for providing telemedicine to chronically ill patients at home and for self-monitoring. These ways of using technology to provide health care services is proving to be lifesaving in serious cases. The online consultation and videoconferencing is helping to get detailed description for any condition across the globe to provide effective treatment for patient's condition.

Transparency

Enabling in improving the information between patients and clinicians gives significant potential to improve patient health. E-health allows patients and clinicians to transmit detailed medical information and may increase opportunities for clinicians to provide social support to patients. Cyber medicine offers the potential to empower patient's condition by accessing the same medical information as clinicians, thereby strengthening the clinician-patient relationship. E-health providers are also guiding the patients by providing detailed information, providing a fair chance for comparison and choosing of best healthcare providers. Patients armed with accurate medical information may not be able to treat themselves, but they will be informed and able to assist in better treatment and decision making. By keeping transparency in medical information and treatment programmer it is helping the patients to get duped in name of cost, facilities to be provided.

Highly ethical

E-health involves new form of patient- clinician interaction and helps in online professional practice. The e-health is an equitable platform. Caregivers, patients, and their family members are being reliant on social network websites for storing, communicating, and referencing medical information in various aspects of healthcare facilities. The Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule seeks balance by protecting the privacy of patients' health information and assuring that this information is available and provided to certified healthcare professionals. Without misusing the ethics of medicine and healthcare the e-health or cyber medicine are providing the healthcare services which are evidence-based. There is not any misguide is done with the patients, they are provided detailed information about the treatment plan to be followed. As the development is still in the process for enhancing these facilities there is chance where by communicating, discussing and discovering the methods and techniques to be worked on the patient with more efficiency [4-6].

Upcoming Future leading combination healthcare services with internet

The world is developing fast as the speed of shooting star.

The immense development and competition is taking place to become better in each sector is going on. The development is taking place in subfields of the healthcare facilities too, to provide the best healthcare results. The scientists and healthcare professionals are working hand in hand to gain the best healthcare facilities by working on enhancing the different techniques and methodologies of the treatment, bringing new and advanced technologies, invention of curing the chronic and infectious diseases. So, the science is becoming day by day more advanced by using technologies and methodologies to provide the healthcare services. As we are seeing the development of the internet services and the benefits it is providing is not hidden from anyone. The biggest and the developing two main sectors of the world are working together to provide the public health care new achievements by each passing day with immense speed. That day is not far when they will achieve the treatment for each disease and will help to cure them fast and the recovery rate will be maximum and the treatment will be provided worldwide on just a single click. So, the above characteristics discussed on the e-health or cyber medicine are some of the main factors which are developing and increasingly gaining and achieving the goals to give the world best healthcare facilities through internet. This will be the biggest achievement and boost to the healthcare sector when the public will get cost-effective, enhanced, life-saving and accessible treatments for the diseases.

Conclusion

This is the cost-effective, easily accessible, patient friendly and transparent mode of communication platform. Availing the fair chance to people to choose among the best facilities around the world. Now helping to provide the healthcare facilities on the fingertips. Providing the best possible solutions and treatment at home.

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