Impact Of Digital Innovation on Health Sector -A Review Article

Manasvi Agrawal, Dr. Neha Ingale Chaudhary, Dr. Sachin Chaudhary, Dr. Ranjit Ambad, Dr. Nandkishor Bankar

1 3rd year BPTh, Datta Meghe College of physiotherapy.
2 Professordepartment of neurosciences, Datta Meghe College of physiotherapy.
3 Professor, Department Of Cardiorespiratory Sciences, Datta Meghe College of physiotherapy.
4 Associate Professor Dept. of Biochemistry Datta Meghe Medical College, Shalinitai Meghe Hospital and Research Centre Nagpur
5 Associate Professor Dept. of Microbiology Jawaharlal Nehru Medical College, Datta Meghe Institute of Medical Sciences Sawangi (Meghe), Wardha

ABSTRACT

New digital technologies provide better accessibility to healthcare for the public. It gives immense impact on the old traditional healthcare system. It is a boon to health sector. It gives better treatment giving opportunities to doctors and patients can avail the services given by the doctors properly. Digital technologies work on a wider-sector and are without boundaries and limits. The COVID-19 pandemic has also given the boost to digitization and its need in this current scenario. The Aim of this review article is to describe the impact of digital innovation on health sector and the people related to it. This Article also focuses on the challenges faced by the concerned industry and its future.

KEY WORDS - Digital innovation , Healthcare sector , Digitization, COVID -19, TeleMedicine.

INTRODUCTION

Digital innovation improves health care delivery system and improves access of quality treatment to the patients. It also reduces the inefficiencies and drawbacks of the health sector. In recent years the major attention of digital innovation was directed towards the new therapies, procedures and drugs. The new innovations and devices made are portable, light in weight, easy to handle and give instant results. This revises the so called stigma of the clinical set up, the expenses, and the commuting difficulties addressed along with it. The future of the healthcare is linked to digitization.

What we exactly mean by digital health?

It is a synchronised and mechanically booted team work of digitally enabled atmosphere where the technological logic makes it easier to manage the health care. The key concept is based on the motto of minute, specific and precise diagnosis, intervention, time saver and skilled accurate work.

It is the base of future where the ecosystem will be established with exact replenishment of the cause, source, demand and diagnostic or therapeutic interventions.

Digitization has influence on many sectors of the economy. Among the many digital innovations Artificial Intelligence has the major role in it.[1]

Artificial intelligence is increasingly popular and now a day's applied to health system. [5]. the examples of critical and extensive robotic surgeries are done successfully and even in India, the arthoplasty and related surgeries are skilfully done with robotic assistance.

Digital innovation helps the doctor to make faster decisions with giving proper attention to complications and precautions.

Digital innovations also promote more research activities as many sources are available and studies along with sample collection, also the procedures are being rapidly done with faster results. [6]

In the current world the treatment approach is from top to bottom, where the WHO, with doctors and medical personnel are the flag-bearers of the medical healthcare system[7]. The healthcare is accessed by the patients primarily at the hospitals and information is shared or delivered by the medical personnel. But the problem rendered at the facilities are not client centered and is not very much convenient as per the need of the patients because these are designed for and by the medical establishments for their very own convenience and feasibility. The problem with this model is, that it is difficult to manage such a huge population, where more convenient access is desired and expected by the patients.

DISCUSSION

Future of Digital Health

Health care providers mostly consultants, interventionists should include patients in the decision making of the treatment [4] . Patients in cities and towns are much more into of the digital system and aware of the prevailing diseases. Also, health is taken into serious consideration by the urban residents. Exercise has been now inculcated in their daily routine and fitness is given importance.

But when rural areas are taken into consideration more emphasis should be given on training the people and educating them about digital transformation of the traditional methods. If the patients are aware of the treatment and what all procedures they will undergo then they will be able select appropriate treatment for themselves and their families.

In these difficult times of COVID -19 Pandemic, Telemedicine was found to be very fruitful for the patients. Patients could stay connected with their doctors without visiting them through their phones and laptops. With the global lockdown and other restrictions it was very difficult to provide the desired help and assistance. A massive drive which included the training of medical staffs and professionals was undertaken to treat the patients suffering from this disease.

One of the most significant selling points of electronic health records is that they allow the doctors to access relevant patient data instantly which increases the interoperability.

When it comes to making the Covid Vaccines and research regarding the same, modern technology has been proved very much successful and important. The covid testing machines, techniques and results are some good examples of how modern digitization technology is useful and is saving lives of so many people.

Today's generation, is much more indulged into technologies and digitization has become a part of our lives, which is inevitable[4] . So, we must focus on training the younger generation to increase the health standards and better usage of innovations.

The Challenges Faced by Digital Innovations

◆ With the advent of digitization we have got a lot of advantages and disadvantages when it comes to using digital media platform resources, information which can lead to medical decisions and study which might not include medical professionals[4].

◆ Accuracy of data which is provided by these devices are inconclusive and vague.

◆ The data which these devices display should be reliable enough.

◆ Professional should be involved and they should be properly trained.

◆ Privacy and security of data of the users should be taken care of.

◆ Patient might move on to these tools rather than going to doctors which might give them false results.

◆ The Affordability of modern treatment is out of scope for a larger part of the population.

◆ If a new technology is introduced the old practitioners might repel the new trend and would stick to their traditional way of treating patients.

CONCLUSION

Digital Innovation gives more opportunities to people to discover science and technology.

In the human world there has been a substantial increase in the health care sector, this has been proven and been undertaken due to the robust digitization.

With the increase in the number of modern technologies the life expectancy of people has increased many folds by a good percentage. This goes not without saying and taking into consideration the professionalism shown by the healthcare facility and industry. With proper guidance and educational awareness about human body and anatomy, a larger chunk of the population can be uplifted from the poor mindset and wrong information about the human body and diseases.

REFERENCES

[1] -Digital innovation in healthcare : A device with a method for monitoring ,managing and preventing the risk of chronic poly-pathological patients. Importa G1, Luca V2,IllarioM1-3,Triassi M1

[2]Adoption of Digital Technologies in Health Care During the COVID -19 Pandemic: Systemic Review of Early Scientific Literature. Davide Golinelli, MD , MPH, Erik Boetto,MD,and Maria Pia Fantini ,MD

[3]- The digital transformation of the healthcare industry: exploring the rise of emerging platform ecosystems and their influence on the role of patients. Sebastian Hermes1, Eric K.Celmons 2

[4]-Digital health is a cultural transformation of traditional healthcare. B Mesko, Z Drobni, E Benyei, B Gergely , Z Gyorffy -Mhealth ,2017

[5]Artificial future of global health [THE LANCET] Nina Schwalbe,MPH

[6]- Literature review of digital transformation.

[7]-Digital technology and the future of health system. Marc Mitchell & Lena Kan -PubMed 2019