

Question # 02

A- What are the potential benefits and challenges of implementing Artificial Intelligence (AI) in healthcare? Discuss the impact of AI on patient care and medical diagnosis.

Answer

Introduction

Artificial intelligence (AI) has revolutionized the world to the extent that it is now becoming a part of every field. Healthcare too has benefited from the fruits of AI in several ways and continues to do so. As AI has made life a lot easier for the healthcare professionals. They take the use of AI in diagnosis, prognosis, treatment plans, overall patient care and

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many other healthcare domains. It is not only patients but doctors as well have benefited to a great extent. AI has As ~~ex~~ everything else, AI too comes with a cost. Apart some advantages, AI poses some challenges too. Job loss, increased dependency over machines and lack of human interactions are some of the factors that adversely affect the effective use of AI in healthcare. However, it is an undeniable a fact that AI has made the health sector advanced and efficient than it was before.

Advantages of AI in Healthcare

a- Effortless Process of Appointments

One way AI can help in health sector is if it is integrated in the bookings of appointments. Patients usually go through a

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time taking process of taking an appointment with a doctor. Sometime there is long queues, other times patients have to wait on calls.

These lengthy process exhaust the already stressed patients. At such points, AI can prove to be an efficient tool. By implementing AI into the process of appointments, it can save patients times and hospital's burden.

b - Seamless access to patient history

Another way AI can help is in the process of accessing patient history. For regular patient or those who often visit the same doctor, hospital or clinical authorities should integrate the use of LMS. LMS can assist doctors as well as patients to get access to their history. It would save them from the burden of piles of files which they carry with themselves. Similarly, It would also save the

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time of doctors.

C- Helps Patients approach best doctors

AI is an effective tool in finding a best suitable doctor for a patient. Patient would not have to ask around for a qualified doctor. But they could easily find one at the ease of their home. Such initiatives are already taking place around the world. In Pakistan, an app known as Moham is a best example of such approach.

d- Assist in Diagnosis

The use of AI is also effective in the diagnosis of a patient. If the patient's data is already saved with AI based apps and websites such as LMS, it can help them to find out the nature and extent of a problem. It can also help doctors to thoroughly study the symptoms.

of a disease and plan a treatment accordingly

e-Treatment Planning

Specific treatment plans for each individual is a tiresome job. Doctors have to take everything in mind. They have to analyse symptoms of the disease, the development and also the previous treatment plans. All these can be effectively done by AI.

Challenges caused by AI in health-sector

a- Job Loss

Job loss is one of the major challenge poses by AI. As mentioned earlier, integrating AI into the reception tasks, fee payment processes and the on-site booking systems can cause

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the hospital staff to lose their jobs.

b- Increased dependency over machines

Dependency over machines is one of the drawbacks of AI in healthcare system. Technological tools are part of every aspect of life. If the remaining tasks which are operated by humans are also transferred to AI, it could lead humans to depend on AI for each and everything. It would be a serious challenge to all the manual tasks.

c- Lack of human interactions/support

Health sector is a field where patients need immense human support. The heightened use of AI in this sector could lead to less interaction among the already digitally-isolated human beings. This way the support patients need

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could be lost in the web of AI developments.

d- Machine Glitch can cause problems

Integrating AI into healthcare system would lead to heightened use of machines. However, machines often experience some defaults.

Due to the defaults or even minor glitches could disrupt the functioning of the health system. They would need continued monitoring in order to prevent any disturbance in the machines.

Conclusion

Artificial intelligence is increasingly integrating into people's lives. Life without AI is not possible. Healthcare too is highly influenced by the use of AI. It has improved the efficiency of the sector by advancing its multiple domains including appointment process, access

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to patient history, approaching qualified doctors and assistance in diagnosis. However, there are also some potential challenges of AI in healthcare. It can lead to job loss, increased dependency over machines, lack of human support in hospitals and also a glitch in a machine can lead to bigger problems. All these pros and cons makes AI an two edge sword. However, if concrete measures, policy reforms and increased surveillance can help overcome these potential challenges.