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Artificial Intelligence in Diagnosis

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Dear Editor,

The term Artificial Intelligence (AI) was first used by John McCarthy in the year 1955 and reflects the capacity of machines to acquire sufficient knowledge for various skills including those involving the cognitive skills such as sensing, processing, reasoning etc.

Machine learning (ML) was first suggested by Arthur Samuel in the year1959 to acquire skills automatically and improvise upon them without prior programming.

AI is "the study and style of intelligent agents" where an intelligent agent can be a system that predicts its environment and accordingly plans actions. AI can assist providers in a variety of patient care and intelligent health systems.AI techniques ranges from learning of machine to vast learning for diagnosis of disease, discovery of drugs in a healthcare setup. Various sources are needed for diagnosing diseases more accurately utilizing AI techniques in the form ultrasonography, Magnetic resonance imaging (MRI), computed tomography scan(CT), Mammography etc. For diagnosis of disease, planning is essential by AI and it is vital to have data, analytics, networks, and crucial insights which is continuously expanding in AI in accordance with the healthcare advances. AI cover the diagnosis of, cancer, diabetes, chronic diseases, heart disease, stroke and hypertension, and liver diseases etc. Nowadays Medical experts have better understood how AI can be utilized for ailment diagnosis, leading to proposals for further development of AI based modalities. Healthcare professionals has to identify the obstacles before the sickness may be detected in conjunction with AI. Doctors do not only rely on AI-based approaches as they are unclear about the diagnosis accuracy through AI so, training is required for AI-based systems approaches to increase the accuracy for diagnosing diseases for doctors. A decentralized federated learning model plan should be also be chalked out for ailment datasets for early detection of diseases more accurately.

As AI progresses medical knowledge and diagnosis will undergo sea-change, particularly post-pandemic. However, the humanistic aspect of patient-physician relationship needs to be preserved and promoted.

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