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Editorial

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Artificial Intelligence and Medicine: The Next Era

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The world is changing rapidly into digitalization. Future of healthcare will be greatly improved and reshaped by artificial intelligence (AI), which refers to a wide range of computer-executed tasks that resemble human intelligence. The concept of Artificial intelligence is now being used in medicine, including human biology, robotics, medical diagnosis, and therapeutics. The two primary fields of AI in medicine are virtual and physical. The virtual branch consist of informatics techniques ranging from deep learning information management to control of health management systems, including electronic health records, and active physician treatment decision-making support. The physical branch is best represented by robots used to assist the elderly patient or the attending surgeon. There is another important thing that comes under physical branch is the nanorobots, a unique new drug delivery system [1].

However, there are certain concerns that need to be addressed before full implementation of AI in medicine. The top most concern existed in clinical setting with regards to AI is following [2].
1) The anthropological implications of AI in the clinical setting.
2) The approaches and frameworks utilized to address ethical issues in medicine.
3) The impact of AI on clinical practice, particularly its relation with clinical judgement [2].

Further analysis, evidence of these applications' medical utility and economic worth, and the creation of interdisciplinary application strategies are all necessary due to the societal and ethical complexity of these applications. It is also important that implementation of AI should have a positive impact in reducing the workload of physician rather than in replacing him. AI is frequently considered as a "black box," where it is impossible to understand how an algorithm came to make a specific suggestion. One could argue that the "black-box" issue need not be as worrisome for algorithms in applications where the stakes are not patient-centered but rather concentrated on efficiency or enhanced managerial operations. However, when thinking about AI applications that try to enhance patient outcomes, especially when things go wrong, the issue of accountability is far more important. As a result, it is ambiguous who should bear accountability in the event that the system is flawed. Since the physician neither developed nor was involved in the control of the algorithm in any way, it may seem unjust to hold them responsible, while holding the developer responsible seems also unreasonable as he is far from clinical context [3].

Contrary to the generally hopeful perspectives promoted in the media, the general public is less trusting in AI in medicine. The degree of trust depends on the medical discipline being examined. Higher levels of AI trust are highly correlated with specific demographic traits and those who have a generally favourable opinion of AI and its effectiveness [4].

Undoubtedly, AI can reduce error and enhance precision in medical diagnosis. It could lessen the effort for healthcare personnel while also improving the quality of the job performed. It might give people greater control over how they maintain their health and cut down on needless hospitalizations. Additionally, it might broaden the field of medical understanding and enhance present clinical advice.

However, it's crucial to avoid exaggerating AI at this point. Its implementation in healthcare will be a methodical, gradual, and progressive process that involves stringent control and monitoring of its application and effectiveness. AI can help patients and raise the standard of care when combined with feedback and oversight from medical personnel.

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