

The promise of AI in medicine: A call for greater education for Pakistani medical professionals

Muhammad Masharib Khan, Sumaira Malik, Fabiha Vohra

Madam, AI is revolutionizing the world in all spheres and the institution of medicine worldwide is no exception. While we are most familiar with its contribution to radiology, AI has now extensive applications within dermatology, ophthalmology, pathology, medicine, ophthalmology, neurosciences and more. Through progressive efforts of both doctors and programmers, AI is now becoming more adept in the field of medicine. Some of its applications in modern medicine include staging of skin cancers by looking at dermoscopic images¹ classifying age-related macular degeneration and diabetic macular oedema by through OCT images² and more. The accuracy by which AI performs these tasks is comparable to a human being.

However, Pakistan being in the developing stage is still lagging behind. With inadequate resources, constant economic desolation, and limited knowledge and data in the field of IT, the country is far behind in this rapidly progressive field.

According to a study that included participants throughout Pakistan 74% of doctors and 68.8% of medical students had a basic knowledge of AI but only 27.3% of doctors and 19.4% of students were aware of its medical applications.³ In another study only 56.7% of the participants were familiar with AI and its subtypes, which highlighted the unawareness about AI in more than 40% of the participants. These studies clearly show the deficit in knowledge that medical personnel have about AI, its applications and impact on health care.⁴

AI and its rapid progress in health sectors worldwide are creating discrepancies between them and us. Hence, the senior authorities in our education system should come up

Final year MBBS Student, Karachi Medical and Dental College, Karachi, Pakistan.

Correspondence: Muhammad Masharib Khan. e-mail: masharib29@gmail.com

ORCID ID. 0009-0006-1714-8054

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with a proposition that can shorten this gap. By introducing basic levels of AI in the medical curriculum with a course spanning only around 1 week, including basics of coding and computational thinking,⁵ our medical personnel will be able to incorporate a fundamental level of computational thinking and coding language. This will help them in adapting to the revolutionized healthcare system as well as give them enough command to grapple with it and give feedback to improvise AI even more. And since medical science is based on logical reasoning and problem-solving, much like IT, we believe that our medical students can and will be able to inculcate this into their skills. This can be our very first step towards a much more efficient and progressive healthcare system.

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