

## ARTIFICIAL INTELLIGENCE: A FRIEND OR THREAT TO RADIOGRAPHERS?

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Artificial intelligence has quickly spread across the medical imaging industry like in image interpretation, reporting in short nearly in every aspect of radiography practice. AI is used widely to increase the diagnostic accuracy, to decrease workload and to improve the patient outcome as the healthcare system is upgraded to digital transformation [1]. Now-a-days radiographers are talking about AI, that rather it's a helpful tool or is going to replace them.

AI is not only advancement in technology; it has significantly impacted the perception of a radiographer regarding their profession, training and ethical responsibilities [2]. Now with the advancement radiographers must adapt to this transition, uphold their proficiency, and ensure patient-centered care. The question arouse for AI replacement is not simply regarding its benefits of harmfulness, it's about the question that how the industry would change to fit in this automation.

Upon critical thinking, it is observed that artificial intelligence has been both a valuable tool and disruptive force in radiography. How it is narrated, managed and used give its duality. Reason why people are afraid of AI is that they think that it might take over their role as a radiographer, though AI is good at interoperating and analyzing the image but still it does not have contextual abilities of having awareness, empathy and judgmental skill that are crucial for therapeutic treatment [3].

AI helps radiographers to do their job in less stressed and better way. Automated systems can identify important parts of body and advice better exposure settings. AI powered dose optimization techniques make sure that radiation exposure remains minimal during treatments [4]. Because of this radiographers have more time to talk to their patient and making them feel better by telling them that minimal exposure is given to them.

Machine learning can help professionals to detect disease patterns and make them educated to know how well therapies will work. This advancement helps the radiographers to work more than a technician and they can also be a part of research team. Thus radiographers need to understand how to read the data and think critically to become a specialist in automation.

Along with the usefulness of using AI there are some risks that come along with it. People will depend totally on automated systems, which is the crucial point to think about. Radiographers will stop thinking critically and could lose their ability to detect pathologies. So radiographers need to establish a balance between using advanced technology and using their own brains in making decisions [5].

In some peoples point of view is that this automation will take away their role as a radiographer. But history shows that advancement in technology usually changes the way of doing tasks instead of getting rid of them. It is noticed that AI has created new job opportunities in radiography, like application specialist, data analysis and researchers [6]. Those who will adapt themselves to new AI techniques will emerge and fit in with the AI age. So the radiography future will depend upon changing the rule and boundaries of using AI.

To sum up, artificial inelegance is a chance for a radiographer to grow and at the same time a problem, but it depends upon how you look at it and how ready are you. It emerges the person to move away from its traditional imaging practice towards a future that is based on data and focused on the patient. Radiographer should not be afraid of automation; instead they should see AI as a tool that improves their skills and broaden their practice. It becomes a threat only for those who are not aware of understanding it correctly, or professionals who don't change their way of performance.

Thus the future of radiography is depending on the combination of machine accuracy and human intelligence. With better use of AI, radiographers will eventually become knowledge integrators by combining clinical judgments, technical and digital skills. Academia needs to change by adding AI related trainings and encouraging new ideas without breaking ethical rules. AI will not take the radiographers place; instead it will give them more power.

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