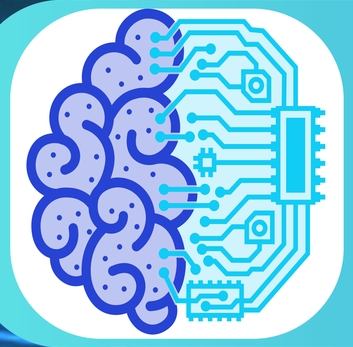


The Irreplaceable Role of Humans in Radiology

By: Kylie Magee



Introduction

- Getting accepted into radiology school was one of the most exciting moments for me.
- Hearing that AI and robots could replace radiologic technologists made me nervous about my career choice.
- During schooling, I realized radiology is about more than just taking images.
- Patient care, communication, and human connection are important parts of the job.
- Technology cannot completely replace the human side of patient care.

Rise of AI

- AI is becoming a normal part of everyday life.
- It is used in things like navigation, facial recognition, recommendations, and creating images.
- AI is also becoming more common in healthcare.
- Healthcare AI can help improve efficiency and staff workload.
- This raises questions about how AI could affect careers like radiology.

Patient Care

- Patients remember how they were treated, not just the tests or scans they received.
- AI can help with radiology tasks, but it cannot provide empathy, reassurance, or human connection.
- Pesheva (2023) explains that AI-generated radiology reports still differ from human-written reports.
- AI should support healthcare professionals, not replace the human side of patient care.

Communication and Teamwork

- Every patient requires different care and positioning.
- Radiologic technologists must balance patient safety, comfort, and image quality.
- Injured patients may require creative positioning and quick adjustments.
- These situations require critical thinking and problem-solving.
- AI can assist with images, but it cannot physically assess patients or respond to their needs like a human can.

Positives of AI

- AI could support technologists and improve workflow in the X-ray department.
- It can help with exposure factors, positioning, and image quality.
- AI could reduce repeat images and unnecessary radiation.
- It can compare current and previous images to identify changes.
- AI can help analyze images and support diagnosis and treatment planning.
- Instead of replacing technologists, AI can support their skills and improve patient care.

Critical Thinking

- Each patient presents a different challenge for the technologist.
- Positioning may need to be changed depending on the patient's injury or condition.
- Rad techs must think quickly to get useful images without causing more discomfort.
- They must adjust to the patient, equipment, and environment at the same time.
- AI can offer suggestions, but it cannot physically interact with or assess the patient.
- Real-life situations require hands-on skills, flexibility, and personal judgment.
- These skills develop through clinical experience and working directly with patients.

Conclusion

- AI should be used as a tool to support radiology professionals, not replace them.
- Radiology requires patient care, critical thinking, teamwork, and adaptability.
- AI can help with efficiency, image quality, and detecting possible abnormalities.
- AI cannot provide compassion, personal patient care, or handle unexpected situations like a trained healthcare worker.
- The future of radiology should combine AI with the human skills that are essential to healthcare.
- Radiology workers will continue to play an important role in patient care.

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