Perspectives of radiographers towards artificial intelligence integration in medical imaging

Ahmad Zaiki FW, Mohd Sobre R

Department of Diagnostic Imaging and Radiotherapy, Kulliyyah of Allied Health Sciences, International Islamic University Malaysia, Kuantan, Malaysia

ABSTRACT

Introduction: Artificial intelligence (AI) systems could replicate the intelligence of human brains are heavily being used in the medical industry and modalities as technology advanced and became increasingly valuable to people and the medical field. It undoubtedly aids with a variety of medical issues, including a cardiac event, fracture, neurological condition, or thoracic complications in which quick diagnosis and treatment options are possible with AI. **Materials and Methods:** A cross-sectional study design using questionnaires was used to survey 102 Malaysian radiographers working in various sectors of hospitals in the country, including research university hospitals, private hospitals, and public hospitals, that provided healthcare services with certain inclusive and exclusive criteria to gain their perspectives on an integration of AI in the medical imaging field. Data was processed using SPSS software version 27. Chi-Square Test was used to compare the expected outcomes in terms of percentages and p-value related to radiographers' perspectives. Correlation studies were utilized to investigate the relationships between the demographic backgrounds of the radiographers and their perspectives towards AI integration. **Results:** This current research has explored the potential uses of AI in Malaysian healthcare, such as improving the accuracy of medical imaging and predicting and preventing diseases, which can lead to better health outcomes for patients. The majority of radiographers in all sectors were in favour of AI in helping improve seamless workflow in diagnostic imaging. **Conclusion:** The findings of this research can be used to develop effective strategies for incorporating AI into radiology training programmes and workflows, which can enhance the efficiency and effectiveness of diagnostic medical imaging in Malaysia.

.