



# The integration of radiology and its importance in medical education

N Joshua\*

Department of Medical Education, Hashemite University, Zarqa, Jordan

\*Corresponding author. E-mail: [joshua@gmail.com](mailto:joshua@gmail.com)

**Received:** 02-Aug-2022, Manuscript no: GJMPHE-22-73016, **Editor assigned:** 05-Aug-2022, PreQC no: GJMPHE-22-73016 (PQ), **Reviewed:** 19-Aug-2022, QC no: GJMPHE-22-73016, **Revised:** 26-Aug-2022, Manuscript no: GJMPHE-22-73016 (R), **Published:** 02-Sep-2022, DOI:10.15651/2449-1802.22.10.046.

## DESCRIPTION

It is crucial for medical students to have a fundamental understanding of radiography. Medical students are introduced to fundamental concepts and abilities throughout pre-clinical training. However, there are several inherent limitations in the current education system and radiology instruction. It explains crucial importance of radiology education for medical students is examined, along with the current situation. It also draws attention to the drawbacks and related difficulties and suggests solutions. During their interactions with patients, medical students are exposed to informal radiological instruction. In recent years, increased focus has been placed on the importance of early academic radiology instruction for medical students in their pre-clinical years. Medical students can focused on radiology instruction as a clinical tool throughout their clinical experiences and in the subsequent clinical practice. Additionally, radiologic imaging can instruct medical students in anatomy .The determination of consequences, the prognosis and the stage of the disease are all aspects of the clinical diagnosis plays a crucial role. The undergraduate exposure to radiology courses gives medical students a perspective on the field as a potential career. The students can also create beneficial connections and professional networks. Artificial Intelligence (AI) in radiology is crucial to the advancement of radiology education. When combined with high-quality instructors, advancing radiology practice using AI tools enhances radiological education by making the students better and faster learners. The diagnosis and therapy process includes radiology as a crucial component. The education of pre-clinical medical students should include a foundational understanding of radiography. Understanding the morphological, pathological and physiological features of the illness process is made easier by imaging techniques as X-ray, ultrasonography, MRI, CT and Positron Emission Tomography (PET). Students should

learn the fundamentals of radiology, including how to use these many imaging technologies in clinical practice and how to identify diseases. A key benefit over the existing radiology teaching procedures are extremely sensitive, specificity and accuracy of AI-based applications in detecting subtle radiographic and tissue-based abnormalities. Artificial Intelligence (AI) has the potential to eliminate the inter-reviewer variability in visual interpretation by spotting changes in imaging patterns that are difficult for human eyes to notice. An illustration is the ability of brain MRI to accurately identify early ischemic stroke-related tissue changes within 4.5 hours of the onset of symptoms with increased sensitivity than human observations. AI can also spot changes in picture patterns linked to poorly known illness causes, such as autoimmune myocarditis brought on by immunotherapy. To make improvements, radiology education initiatives require a root-cause investigation. The pre-clinical medical students' curriculum should incorporate radiology education with a focus on picture interpretation, fundamental knowledge and principle evaluation. Students can acquire the visual interpretation skills necessary for the clinical stage. Additionally, radiologists look for chances to significantly influence the health education curriculum. Radiology can be quite beneficial for learning image analysis. Additional organized online classes for independent study may also be helpful. In order to meet the always rising demand in the field, more radiologists should be trained in residency programme. Students should have a thorough understanding of the benefits and of selecting radiology as a career. More students are having a substantial impact on clinical practise and medical education, increasing the number of future radiologists with a love of teaching. In addition, Intervention Radiography (IR) should be highlighted as a top career option. Clinicians can perform functions to treat and diagnose a variety of illnesses, such as tumors, using IR a specialized branch of radiology. In order to diagnose, monitor and treat diseases, radiology utilizes a variety of

imaging techniques that are common in the medical industry. Additionally, AI upgrades this component to a higher condition. The relevance of implementing AI and the understanding of these many imaging techniques should be emphasized in the preclinical medical curriculum. However, it is still apparent that students' inadequacies in this area need to be addressed.

In order to produce qualified radiography students, experts and radiologists who can provide higher-quality and more reasonably priced medical care, more techniques to enhance and increase the level of radiography education should be put into practice.