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**GAME-CHANGING
INNOVATIONS**

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NEW HORIZONS FOR RADIOGRAPHERS

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Radiographer and Radiological technologists are key decision makers in the delivery of radiology diagnostic services to patients. Within clinical, they operate services in general radiography, fluoroscopy, portable, mammography, dental, computed tomography, ultrasound, magnetic resonance image and nuclear medicine. Traditionally, radiographers are responsible for producing high-quality diagnostic images that answer the clinical problem at the lowest radiation level. These images are essential in the modern diagnostic setting. They collaborate with and support consultant doctors in the delivery of crucial services in these areas. While the final diagnosis has traditionally been the role of the radiologist, changes driven by research, education, technology and service have increased the demand for clinical and diagnostic input by radiographers.

Although several researches have been conducted internationally, very little is known about how the health sector is affected by limiting the role of the radiographer to a technical domain in the Middle East. The current undergraduate preparation for radiography practice meets best practice, however, what is not known is how the reality of clinical practice affects recruitment and retention of radiographers. Radiographers showed a strong desire to research, learn and innovate, and the dynamic and efficient technology development has helped to change their work and made them ready to adopt new changes. The shortage of radiologists and the spread of medical diagnostic imaging has created a situation in which highly trained, highly skilled radiographers have been called upon to fill the gap in diagnosis and image interpretation services.

An example of where radiographers are working at image interpretation, and diagnosis already exists in the UK's NHS healthcare system, where radiographers deliver services, are recognised as advanced

practitioners, and incorporate the provision of final clinical reports by appropriately trained radiographers. Several countries including Canada, Australia, Norway and Denmark changed their healthcare system by developing models of advanced radiographer practice, which includes definitive clinical reporting. The competency and performance of trained radiographers to provide definitive clinical reports was investigated in many articles worldwide, and it is stated that radiographers' reports have high confidence and accuracy.

Radiographers are able to make first line interpretation of images in support of patient management and, following approved postgraduate training. Nevertheless, irrespective of the level of preparatory education it is not necessarily the case that the role of a professional in one country will translate to another healthcare setting in another country.

The radiographer reporting practice will continue growing in the future and will become crucial to the delivery of efficient and timely imaging services in the UK. The acceptance of the need to move services towards better 24-hour provision can only emphasise the value of radiographers' contributions.

Preliminary clinical evaluations and clinical reporting are core parts of the radiography profession's scope of practice, and the benefits are well evidenced and far-reaching. By developing their scope of practice in this way, radiographers are helping the clinical imaging service meet the needs of patients and referrers for rapid access to the right imaging examinations and the ensuing outcomes and reports.

Healthcare systems in any country who would like to move towards implementation of radiographer's role in image interpretations should work extensively with the academic institutes and professional bodies to develop proper education and training programmes. Typically, this will involve a formal postgraduate degree together with extensive clinical training and supervision. The accuracy of radiographer


and confidence in image interpretation and reporting will improve with appropriate education and training.

Professional societies and organisation at the national and international level should work hand-in-hand to develop and highlight the importance of the new role of the radiographer through developing professional journals, professional excellence and to define a set of standards, which can be followed by local bodies.

How Do We Get There?

It is a long way to go, much work to do but we have got the energy, enthusiasm and at the end, we will do it. A strong collaboration between different parties related to radiographer practice to discuss the advancement of the radiographer practitioner role in several pathways is required, such as:

- Development and innovation of the role acceptance by health organisations and the clinical team
- Establishment of a multi-disciplinary research
- Motivation of the radiographer to accept advance practice role

In addition to the above pathway, a strategic plan for five to 10 years should be developed, including academic degree programmes for radiographers, and membership at national and/or international societies for the radiographers who wish to improve their career pathway. Moreover, it is very important to believe that the introduction of an advanced radiographer practice role in the medical imaging services will revolutionise it. 

References available on request.

Dr. Abuzaid will be speaking on 'Effectiveness of Thyroid Shield in CT Brain: Evaluating the Dose Reduction and Image Quality' at the Total Radiology Conference on January 29, at the Arab Health Exhibition and Congress