

# Integrated pathology and radiology learning for a musculoskeletal system module: an example of interdisciplinary integrated form

Rama Santhosh Karri  
Aditya Uday Kale  
Nikita Maria

College of Medical and Dental  
Sciences, University of Birmingham,  
Birmingham, UK

## Dear editor

The most difficult step for a medical student is making the transition from student to qualified doctor. Exam performance is no longer the primary objective; the junior doctors must integrate all their knowledge together to interpret the clinical signs, symptoms, and results from investigations. Missed findings can have a significant impact on patients' lives. Thus, we thoroughly concur with the findings of the article by Atta and AlQahtani.<sup>1</sup> Integrating two fields, radiology and pathology, while still in medical school not only enhances the students' interest into the field but also improves their performance.

There is a plethora of literature detailing the lack of ability and confidence experienced by both medical students and junior doctors in interpretation of chest radiographs.<sup>2,3</sup> The University of Birmingham Medical School includes plain radiograph interpretation as a possible Objective Structured Clinical Examination (OSCE) station in both third- and fourth-year OSCE stations. However, more emphasis is placed on learning how to read a radiograph systematically rather than identifying any pathology. We believe this to be a missed opportunity. As suggested by Atta, an integrated course throughout the three clinical placement years would boost both confidence and knowledge. Indeed, this issue appears to be even more significant when in a study, out of 138 doctors, almost one-fifth (18%) were unable to identify a normal chest radiograph.<sup>4</sup>

The increased student satisfaction, as reported by Atta and AlQahtani,<sup>1</sup> is not surprising to us as final-year medical students. We believe that linking practical skills with book-based learning enhances our ability to learn and retain information. This is not limited to just radiological teaching. Mueller et al<sup>5</sup> stated that the use of simulators in preclinical basic courses, such as pharmacology and physiology, can help to link theory and practice in medical education. Although these often require more preparation, the practical aspect and the change from routine teaching methods make such sessions far more stimulating.

However, one aspect to consider is the time cost of such teaching. The article has not discussed the length of time or who delivered the extra teaching sessions. Although the material for the integrated radio-pathological course was discussed in detail, the article lacks clarity on the course material for the control group. If the

Correspondence: Rama Santhosh Karri  
College of Medical and Dental Sciences,  
University of Birmingham, Vincent Drive,  
Edgbaston, Birmingham B15 2TT, UK  
Tel +44 789 491 3172  
Email rsk155@student.bham.ac.uk

intervention group received significantly more teaching time, then both the satisfaction and the performance of the group would be affected. Furthermore, the true advantage of such teaching could only be achieved by seeking doctors with high levels of experience, for whom further teaching may be difficult due to heavy clinical pressures.

Nevertheless, it is refreshing to see a shift in thinking, moving away from 1-day revision courses, toward ensuring that such key training is integrated into medical school curricula. Such integrated teaching has the potential to improve radiology interpretation abilities and, interestingly, also improve understanding of basic sciences and pathology across many specialties. Integrated teaching would ensure that students develop the ability to think laterally and improve their competence as doctors.

## Disclosure

The authors report no conflicts of interest in this communication.

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