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LETTERS TO THE EDITOR

An introduction to the status of radiology education in a leading Chinese medical school: Comparison to a leading US medical school

Dear Sir

Analyzing similarities and differences between two radiology education systems, Peking Union Medical College in China and University of Michigan in the United States, may not only reveal new ideas for their own enhancements of teaching and learning but also reflect different modern clinical radiology education status in two countries.

First, PUMC radiology provides lecture, hands-on workshop and group discussion, but no 'bench-side' clerkship study. The latter was however proved to be beneficial in improve the impression of radiology as a specialty (Branstetter et al. 2007). UM encompasses their radiology lectures with anatomy class in the first school year and up to 3 months of radiology elective courses later in the program. Those students who do not choose radiology elective course will have to graduate without clinical radiology training, which could be a significant deficiency when those students become clinical radiologists.

Second, in PUMC, usually four students have chance to practice an 8-month research project. While in UM, 24 students have the chance to do a 1 month project. Still, it is believed at both sites that radiological research projects are beneficial to enhance the understanding of both clinical knowledge and new techniques.

Third, in PUMC, teaching and interpersonal communication skill training are relatively ignored compared with specialty knowledge. These two skills no doubt facilitate effective and empathic relationships with patients and effective collaborations with other health care professionals.

Fourth, in PUMC, Students get their final radiology grade almost entirely from computer written examinations. Learning from UM, open-book surveys and student presentations are strongly considered to be added into students' final grade. But these assessment icons, by their subjective nature, are limited and flawed. So a better and fairer standardized evaluation system is imperative for both departments.

Based on these simple comparisons, several important aspects are highlighted for further improvements of both but especially of PUMC radiology. We believe that new radiology education programs will be implemented after careful assessment in PUMC and in the future in whole China.

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A culturally sensitive audiovisual package to teach breaking bad news in a Lebanese setting

Dear Sir

Teaching medical students about breaking bad news is an intriguing assignment with vast variety in the teaching methods. Culture plays an important role in truth disclosure and patient autonomy.

In 2005, the Communication Skills Working Group at the American University of Beirut produced a culturally sensitive audiovisual package (AVP) in the native language, Arabic, on breaking bad news. The AVP illustrates different learning themes through watching and discussion of 12 video clips that included scenarios based on real events. Two scenarios depicted two persons with cancer; one lady not ready to hear her diagnosis while the other asked the doctor to be straight with her. The first case also illustrates the culturally related issues of family involvement and interference. The AVP is concluded with a scenario that deals with organ donation and exposes local religious misconceptions.

The AVP was delivered over 3-hour workshop to second-year medical students distributed into groups of 10 students. At the end of each clip, the facilitator asked the students to comment on what they have watched; then a commentary was played to provide a summary of the key objectives of the clip.

In a post evaluation questionnaire, the students commented positively on the organization and clarity, discussion of real life situations, DVD quality and content, and the role of facilitator. They considered that 'it is easier to learn through discussions and visual aids because this is the only way to communicate such a topic'. Potential barriers to truth disclosure included: fear of harming the patient, family interference, and physician's discomfort.

The DVD depicts the dilemma between family desires and the autonomy of the patient. Fifteen percent of the students

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who reported observing a senior physicians breaking bad news stated that the doctor dealt with family members keeping the patient in the dark. A cross-cultural study in the United States showed that Korean Americans do not fill an advanced directive form, and Afro-Americans are less likely to complete such a paper (16%) when compared to Caucasians (40%) (Searight & Gafford 2005). It seems that our population value beneficence more than autonomy and highly value the medical doctor to make decisions on their behalf.

Teaching medical students to break bad news should embrace a culturally sensitive system; video-based small discussions appear to be a beneficial method. Future research needs to study the impact of this AVP on the skills of students in breaking bad news.

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Should there be borderline candidates or should there be a zone of uncertainty around assessment decisions?

Dear Sir

Assessment results are used to categorise candidates. Some candidates' true levels of ability will be close to categorisation margins, for example pass–fail. For many years these candidates have been referred to as borderline. We wish to challenge this, as we suggest it is not a quality of the candidate, but reflects the ineffectiveness of an assessment system to differentiate where the candidate is relative to the categorisation threshold. The candidate's true level of ability will be above or below the categorisation threshold, it is just the decision makers who are uncertain. The individual candidate score and categorisation threshold score are estimates, as there is measurement error in both (Nichols et al. 2010). So the difficulties in categorisation reflect the error in the difference between these two estimates.

Instead, we suggest that we should report such result as 'currently uncertain and further information required'. This should not be seen as a failure of the assessment system but as a true reflection of the interpretations that can be made. An outcome that is currently uncertain can be valid if not enough information has been acquired to have sufficient certainty in a decision. The zone of uncertainty may be unacceptably large for individual decisions in some categorisations (Emons et al. 2007).

The further information that is required may be additional assessment, as is the basis of sequential testing. Alternatively, further information may be from other assessments, as this may alter the 'pre-test' probability of a categorisation decision and hence improve the certainty.

There may be a point when it is not practical to search for further information from additional or alternative assessment. At this point a judgment will be needed taking into account the implications of an incorrect categorisation decision, such as passing a substandard candidate or failing an above standard one.

Rather than saying that the candidate is borderline, we should recognise that the assessment system has not produced enough evidence to make a decision with sufficient certainty.

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Paralanguage and medical education

Dear Sir

Clinical teaching, which is teaching and learning focused on and usually directly involving patients, lies at the heart of medical education. Clinical teaching retains a strong apprentice-based element, in which experienced doctors pass on their knowledge and skills to students or junior doctors. It is often considered that a good medical teacher or trainer is the professional who has the following qualities: highly

knowledgeable and up to date, competence and good communication skills.

Non-verbal communication plays a major part in conveying the messages in medical teaching as well as in every other forms of teaching. Paralanguage, the non-verbal vocal elements in communication, can add or modify meaning of language, convey emotions and it can be more subtle than any other forms of non-verbal communication. Paralinguistic properties of speech refer to rate, volume, pitch, inflection, quality, and intensity of voice.

Paralanguage is relevant to medical teaching and published research in this interesting field suggests that it can influence teacher's credibility, student's ability to retain information, quality of feedback, and overall student motivation. Interestingly, its impact is greatly reduced in computer-based teaching.

A study by Beatty & Behnke (1980) concluded that teacher's credibility is a function of verbal content and paralinguistic cues. Effective presentation in lecturing, it is suggested, is in a large measure dependent upon the way lecturers express themselves non-verbally with paralanguage playing a significant role (Leopold 1986). Also, perception of competence appears to be dependent on positive vocal cues and this can easily influence students' motivation (Beatty & Behnke 1980).

In the process of feedback on clinical performance of students, junior doctors, peers, which is a key skill in medicine, paralanguage carries a significant importance that can easily influence its overall quality and scope. International variation of languages rhythm, intonation in relation to measuring degree of happiness or sadness, and gender differences in decoding non-verbal cues in communication have an impact in the process of providing and receiving feedback.

Paralanguage is an important element of non-verbal communication and should be a good incentive to focus on future medical education-related research projects. It would be a great benefit for the medical teacher and student if both have an increase awareness of the impact of paralinguistic cues in the context of medical teaching. This can be successfully done through communication skills training and feedback on teaching performance throughout medical career.

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