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Anatomy Education at the Faculty of Medicine of Kuwait University

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The goal of medical education must be to improve the quality of the medical profession. Given that the product of medical education is a student trained to become a clinician, it is the responsibility of educators to appropriately modify the curriculum to achieve this goal. Ideally, medical curriculum is a continuum that must integrate basic sciences with clinical medicine throughout its duration. Additionally, it must emphasize self-directed, life-long learning that improves problem-solving skills of students.

Since the publication of the General Professional Education of the Physician report in 1984 [1], medical curriculum, across the globe, has gone through several stages of revisions. There is no consensus yet; however, there is universal agreement to reduce lecture hours, decrease factual material and details, discourage rote learning and emphasize concepts and principles. These changes are meant to provide more time for independent study and increase opportunities for student/faculty interaction. All of these curricular reforms are believed to develop active, independent and life-long learners with better problem-solving and reasoning skills.

At the commencement of the 2006–2007 academic year, the Faculty of Medicine of Kuwait University, Kuwait, adopted a ‘hybrid curriculum’ incorporating the best aspects of the lecture-based and problem-based curricular models. How has this hybrid curriculum affected the teaching of anatomy at the Faculty of Medicine? There have been two very noticeable changes: lectures have been reduced by about 70% and cadaver dissection has been abolished. However, small-group laboratory sessions are conducted with prosected material, plastinated specimens, 3-D models and images (radiographs, CT scans and MRIs). Reduction in the number of lectures is welcomed by the medical educators, and to some extent, by the students. This change has now been accepted, though reluctantly, by the Department of Anatomy. However, abolition of cadaver dissection is a bit difficult to cope with. The Department of Anatomy believes, and rightly so, that dissection provides the student with an opportunity to realize the human body’s three-dimensional construction and offers an appreciation of human variability. The discovery and resulting appreciation of anatomical variability promotes logical and critical thinking. The small dissection groups encourage teamwork and communication among partners. Furthermore, dissection offers the student an opportunity to acquire manual dexterity and improve psychomotor skills.

An esteemed eighteenth century German anatomist, Friedrich Tiedemann, stated that ‘doctors without anatomy are similar to moles: they work in the dark and their daily tasks are mole hills’ [2]. Over the years several studies have reported on the importance of teaching anatomy in the medical curriculum and on the significance of cadaver dissection. The aim of this letter is not to get into this argument; nevertheless, it is essential to cite a few reports that have appeared in the medical education literature in the 21st century. Johnson [3] and Parker [4] have argued that dissection enhances learning of anatomy and sharpens surgical skills. More recently, Older [5] and Gillingwater [6] have strongly recommended that cadaver dissection cannot be dismissed as obsolete. At the Faculty of Medicine, Kuwait University, the Department of Anatomy provides limited opportunities to dissect human cadavers.

During the fourth year of the 7-year curriculum, there is a 4-week period for electives. We take advantage of this window of opportunity. Regional anatomy courses are offered that provide an option for interested students to dissect a human cadaver. Among the first batch of students of the ‘hybrid curriculum’, 20% of the students opted for these courses. Despite the fact that students were able to dissect either an upper or lower limb, they thoroughly enjoyed the experience and expressed their positive views about the course in their final reports. Similarly, the departmental staff was delighted to guide the students and let them gain the maximum benefit from these short courses. A similar experience of a United Kingdom medical school was reported by Chambers and Emlyn-Jones [7]. In the coming years, the Department of Anatomy will offer several such regional anatomy courses enabling students, based on their interests, to opt for dissecting different regions of the body. It is anticipated that larger numbers of students will register for dissection courses. Thus, more students will get an opportunity to reap the benefits of cadaver dissection, and though limited, this experience will also enable them to confront the issues of death, dying and bereavement early in their medical training.

References

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