Undergraduate curriculum reform in Saudi Medical Schools

Which direction to go?

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ABSTRACT

Curriculum reform in undergraduate medical education is quite essential for the success of the educational process. Saudi medical schools have been involved in curriculum reform over the past 2 decades. Review of the existing literature identifies the following as problems with today's curriculum including: Overcrowding of the curriculum, over presentation of some subjects, presence of relatively non-relevant subjects, dissociation between basic and clinical sciences, repetition of lectures and exams, need for new subjects of clinical relevance, predominantly hospital based medical education with minimal community-based practice, as well as non-optimal use of resources. The authors put forth suggestions for reform of the current curriculum to meet today's problems and future demands.

Keywords: Medical education, undergraduate curriculum.

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Since its inception 100 years ago, the Kingdom of Saudi Arabia has emphasized education as the foundation for development and prosperity. This has included all facets of the natural sciences including medicine. To that end, 6 medical schools were established throughout the Kingdom. Abraham Flexner's report in 1910 on North American Medical Schools has defined today's vision on medical education. This vision is being applied in Medical Schools worldwide including the Kingdom. Such a system is characterized by a dichotomy between basic and clinical sciences. The basic sciences are termed pre-medical and pre-clinical and are taught in the first few years, customarily the first 4 years in the Kingdom. The clinical sciences phase follows the first phase and lasts for 2 years. This system depends on heavy use of lectures and other didactic sessions where the activity is teacher centered. These were often related to independent courses. The Flexenarian system has been applied in Saudi Medical Schools for decades. These colleges have striven to achieve their specific objectives. Periodic reviews of medical school curricula were carried out in each medical school, independently and these have generated some reforms throughout the years. However, several issues were identified that relate specifically to the current curriculum in these colleges. In addition, several newer concepts have emerged in medical education, such as community oriented medical education and problem based/ oriented learning, integrated medical education and learner-centered educational activity.[1-2] Others include the emergence of newer education methods particularly professional and clinical skill

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laboratories and other life-long learner activities. These developments call for a national reappraisal and perhaps unified consensus on these issues. This article addresses some of these issues.

What is the problem of today's curriculum? To answer this question the authors searched existing literature utilizing the keywords: Medical Education, Curriculum and Saudi Arabia and 18 publications were obtained of which 10 were more relevant to the discussion.[3-12] These studies uniformly agreed that problems exist within the current curriculum. These include overcrowding of the curriculum, over presentation of some subjects, presence of relatively non-relevant subjects, dissociation between basic and clinical sciences, repetition of lectures and exams, need for new subjects for clinical relevance, hospital based medical education with minimal community based clinical practice, non-optimal use of resources and the need to involve actively non-university faculties in the process of medical education. From the above it was obvious that issues of concern relate to the content of the curriculum, format and methods of teaching, methods of evaluation, and utility of resources. The identification of these factors reflects the awareness of the medical community of curriculum problems and need for reform.

In which direction should the reform be? A curriculum is "an attempt to communicate the essential principles and features of an educational proposal in such a form that it is open to critical scrutiny and capable of effective translation into practice.[13] Any reform in the curriculum should respond to current problems and future demands.[14] Since the curriculum by itself in most instances evolves overtime. However, changes should be built on the current curriculum. In addition, whatever reform is chosen it should incorporate newer medical education concepts like community-oriented medicine, problem-based learning and integration of sciences in both clinical and basic arenas. The suggested reform of segments/areas of current curricula are listed in Table 1. To ensure the consistent implementation and the success of the curriculum, the unswerving commitment and devotion of the administration and faculty should be obtained. The institution should provide the financial support for the change in the education process and implement mechanisms wherein teaching excellence is rewarded as fully as in biomedical research. Faculty members need to realize that the change in curriculum stems from practical need rather than academic luxury. It is important for faculty to recognize that life-long learning of basic/clinical sciences must shift from the concept of memorizing facts to emphasis to problems solving through methods that focus on self-directed learning and independent study. This alteration in outlook should transcend student and teacher relationship to a learner-facilitator basis through the process and development of critical thinking.[15] It has been said, "the present is the past rolled up for action, and the past is the present rolled up for understanding".[16] A hundred years ago, King Abdulaziz and a group of 40 volunteers roamed the plains of the Arabian Peninsula for a single purpose, to establish of the Kingdom of Saudi Arabia. What made them succeed? Most definitely the understanding and commitment for the common goal. Instructively for us now, the medical community did so because they were united and acted with a common purpose. We should acknowledge, recognize and appreciate this because they effectively prepared the way for those who followed them. The common purpose of the medical profession is to better serve the public and the profession. It thus become paramount that current medical administrators and practitioners should be committed to these objectives and ensure successful reform in curriculum development to better service the community.

Table 1 - Suggestions for reform of the current curriculum.

1.	Elimination of non-utility/non-relevant subjects.
2.	Modify basic science courses to become more clinically relevant/ oriented and inter-related.
3.	Earlier introduction of clinical subjects.
4.	Encourage community-based medical education as opposed to exclusive hospital-based education.
5.	Promote critical thinking and life-long self-learning skills, with acquisition of appropriate and relelvant values and attitudes.
6.	Effective use of available resources including non-university medical faculty.

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