THE FUTURE OF THE CURRICULUM OF ALLIED (APPLIED) HEALTH SCIENCES IN SAUDI ARABIA

Abdulaziz A. Al-Mulhim, JBO&G, Ahmed Al-Kuwaiti, MA, DHCPS
College of Applied Medical Sciences, King Faisal University, Dammam, Saudi Arabia

Background: Despite the dearth of allied health professionals in the Kingdom of Saudi Arabia (KSA), the demand for them has increased. Like any other geographic location, KSA, has its own pattern of diseases. Therefore, the curriculum of the health professionals should be appropriately designed to meet the health needs of hospitals and clinics.

Objectives: To demonstrate that changes in the curriculum of Allied (Applied) Health Sciences in KSA are necessary, and how these changes should be implemented. This paper also recommends that these changes must: (1) be based on the current needs of the community, (2) satisfy the health requirements of the Saudi community as well as the realities of its health practices. The Allied Health Colleges must: (1) undertake a long-term review of the curriculum, (2) ensure that the curriculum reform is continuous, (3) target faculty development, (4) target student evaluation.

Key Words: Allied (Applied) Health, Format of teaching, Continuous evaluation.

Correspondence to:
Dr. Abdulaziz Al-Mulhim, P.O. Box 40093, Al-Khobar 31952, Saudi Arabia
INTRODUCTION

Both the Ministry of Health and the Ministry of Higher Education have evolved a strategy for developing the Saudi human element in the field of health by planning the necessary programs for training Saudi nationals in different specialties of the health profession. The Ministry of Health (MOH) started planning the establishment of health institutions during the fifth development plan (1410-1415). By 1418, there were 32 health institutions which had graduated 272 students. The MOH had already established 13 health colleges and the graduates in that year was numbered 478. Similar institutions have been established by the medical services in the Armed Forces and in the National Guard and student intake has increased over the years.

The Ministry of Higher Education established the first College of Applied Medical Sciences in King Saud University in the year 1402. After that, a similar college was opened in King Abdul Aziz University, and in 1415, colleges were opened in each of King Faisal and Um Al-Qura universities.

It has been estimated that the needs of the Kingdom for the allied medical health professionals is about 130,000, but only 30% of this number is currently Saudi. It is obvious from these facts that there is a need for more allied health colleges and institutions to meet the current as well as the future demands for these health professionals. Moreover, it is also important to restructure the curricula of the existing institutions and design new ones to meet changing health requirements of the population.

Educators must endeavor to understand that certain changes in the society’s view of health and diseases, in the organization, as well as in the delivery of healthcare services have re-shaped their expectations. There have been remarkable achievements in the field of applied health sciences within the last few decades.

It is being proposed, that Health Colleges and Institutes should be in the forefront of the development and improvement of healthcare services in the Kingdom. They should play an active role in the implementation of the government’s policy of ensuring that Saudis are trained and recruited into all areas of the health professions. These institutes should be instrumental in encouraging Saudi students to enroll in the different specialties in the fields of the allied health professions.

The increased demand for allied health professionals such as physiotherapist, respiratory therapists and nursing personnel has prompted medical and health institutes to attract Saudi nationals into various allied health programs. The idea is to provide these graduates with the necessary knowledge and expertise in order to take over from the expatriates who have been running these services. The curriculum and training must be tailored to Islamic values and equip the graduates to meet the professional challenges that lie ahead.

In this paper we are trying to demonstrate that changes in the curriculum of Allied (Applied) Health Sciences in Saudi Arabia are necessary, and to demonstrate how these changes should be implemented.

REQUIREMENTS FOR CHANGE

One means of meeting the challenges of the allied health professions is to base the reform of both the content and the context of the curriculum on the current and changing needs of the society. This change should satisfy the requirements of the Saudi community, as well as the realities of its health practices. All reports identifying problems, claim that reform is essential and urgently needed, and prescribe similar solutions. Many of these reports focus on
two elements: reform of curricular content and instruction, and the internal restructuring of Health Colleges and Institutes. Barriers to change and reform have also been repeatedly identified in literature and commented on by different researchers. It is necessary, therefore, to devise strategies that would remove or minimize these obstacles, and provide a plan necessary for implementing the required changes.6

Other health professionals have been very supportive of the desire for change, and have initiated much of the dialogue and studies needed.6 Such areas as teaching, curricular design and content, as well as the teaching environment–affiliated organizations, and the community have been special areas of concern. However, Coles (1985) has written about formal, informal, and hidden curricula, and has noted that a great deal of what is taught and most of what is learned, takes place within the hidden curriculum defined as the set of influences that function at the level of organizational structure and culture.7

ROLES FOR ALLIED HEALTH PROFESSIONALS
In order to find the best means of educating the Allied Health Professionals and respond to their educational needs, the following new roles and four major attributes based on previous studies and the views of scholars of contemporary Saudi medical education have been identified.6,8,9 These are important characteristics needed to meet the expectations of the Saudi community. They outline learning objectives for students that would promote the acquisition of these attributes.9 To ensure they can and will adequately attend to all aspects of health care, the allied health professional must be altruistic, knowledgeable, competent and conscientious.

The educational objectives of the colleges and the definition of the roles should provide an excellent framework for the creation of curricula that will satisfy the needs of the community.10,11 As pointed out earlier, the demand for change is neither complex nor novel. The difficulty is in ensuring that those changes are properly executed. However, to train a new kind of Health Sciences professional, capable of meeting the challenges of the 21st century, there are certain vital requirements.

It is important that the identified specialist roles be incorporated into the continuum of their education–undergraduate, postgraduate and beyond. While it is appropriate that undergraduate educators take the lead in defining and implementing the necessary changes, similar changes in graduate education should be made and, indeed, in continuing education in the later years in the practice of the profession. One of the reasons for the failure of reforms highlighted in literature is the unwillingness or inability to incorporate the necessary changes in the continuum of education and later practice.9

Role Model Teaching
Role model teaching is not the ‘main thing’ that influences others, it is the ‘only thing’. The inculcation of ethical values and professionalism is a critical element in the process of education.7,4 The behavior of faculty members, in demonstrating – or failing to demonstrate – the desired roles, is critical to any reform process. Since much of Saudi undergraduate Allied Health Education depends upon experiential learning in numerous settings, the power of role models cannot be overemphasized.11 In many undergraduate curricula at present, clinical experience is part of the early training in allied health college.
Requirements for changing students' evaluation and assessment

Two essential strategies required for change deal with faculty development and student evaluation. It is widely acknowledged that student behavior to a large extent is model-dependent. There are numerous opportunities for developing and using methods that provide greater scope for evaluating a wider range of skills and performance of the student. Faculty members need a deeper understanding of the educational sciences and their application to learner motivation. In addition, they need effective teaching and mentoring strategies in order to make the best of all opportunities currently available. Moreover, they need to understand the essential elements of an effective learning environment and the interrelatedness of learning – teaching – supervision – and evaluation. Simply put, faculty members must be trained to be more effective teachers. Besides, evaluation models must be created to measure the achievement of educational objectives linked to the newly defined roles of Allied (Applied) Health.

CONCLUSION

It must be remembered that professionals of the Health Sciences do not work in isolation, but as part of the larger community they are committed to serve. The need to recognize and support the essential role of educators in preparing allied health professionals for the future should be paramount if the current and evolving expectations of the Saudi society are to be met. The appointment of faculty members who are committed to the promotion of Health Science Education as a profession, their subsequent academic advancement, and rewards for outstanding teaching achievements are important aspects that Health Colleges must not overlook.

Leadership is important, and so the role of deans and department chairpersons in this regard is critical. People in authority must do their utmost to engender in their colleagues the importance of incorporating the modeling of roles into their teaching and continuum of education and practice. The leader’s interest and commitment is critical for the success of the current effort to advance the prospects of Allied (Applied) Health Education in Saudi Arabia.

RECOMMENDATIONS FOR THE FUTURE

(1) Promote continuing education to maintain and improve the competence of all allied health professionals engaged in healthcare delivery. (2) Establish a resource center to provide up-to-date information for allied health professionals in the Kingdom. (3) Provide graduates of the allied (applied) health professions with the necessary clinical experience in a setting of supervised clinical responsibility in order to consolidate their knowledge and basic skills for the practice of the profession. (4) Ensure that graduates develop the appropriate professional attitude and ethics in accordance with the highest acceptable standards. (5) Enhance coordination and collaboration of all Health Colleges in the Kingdom. (6) Create a council to oversee the quality of graduates of the allied (applied) health professions in the Kingdom.

REFERENCES

1. Ministry of Health Annual Report. Riyadh: MOH; 1418.
2. Magzoub ME. Studies in Community Based Education. Maastricht, The Netherlands: Network of Community-Oriented Educational Institutions for Health Sciences; 1994.
3. World Federation for Medical Education. Proceedings of the World Summit on Medical Education. Medical Education (Supplement) 1993; 28:140-9.
4. Harden RM, Laidlaw jm, Ker JS, Mitchell HE. AMEE Medical Education Guide Number 7. Task Based Learning: An Educational Strategy
for Undergraduate, Postgraduate and Continuing Medical Education, Part. 2. Medical Teacher 1996; 18(2): 91-8.
5. Al-Awdah S. Lutfi AM, Ibrahim E. The College of Medicine and Medical Science (CMMS) at King Faisal University (KFU), Dammam, Saudi Arabia. Paper presented to the World Federation of Medical Education Planning Conference and Dean’s Meeting 1994.
6. Al-Muhanna F. The Process of Strategic Changes of the Undergraduate Curriculum at the College of Medicine and Medical Sciences, King Faisal University. Advancing Horizons in Medical Education. Proceeding of the First GCC Conference of Faculties of Medicine in the GCC Countries. Kuwait. April 26-28, 1999.
7. Coles C. A Study of the Relationship Between Curriculum and Learning in Undergraduate Medical Education, Ph.D. Dissertation / School of Education, University of South Southampton, United Kingdom, 1985.
8. Al-Sibai MH, Al-Freih M, Lutfi AM, Al-Mahaya SA, Magbool G, El-Mouzan ML. Evolution of the Undergraduate Curriculum at the College of Medicine, King Faisal University. Annals of Saudi Medicine 1989; 9:64-71.
9. Al-Gindan Y, Al-Sulaiman AA. Undergraduate Curriculum Reform in Saudi Medical Schools, Needed or Not? Saudi Medical Journal 1998; 19(3):229-31.
10. Harden RM, Core and Option. In: Walton H (Ed), Proceedings of the World Summit on Medical Education. Medical Education 1994; 28 (Suppl 1):112-3.
11. Miles R. Experiential Learning in the Classroom. In: Allan P, Jolley M, editors. The Curriculum in Nursing Education, London: Croom Helm; 1987.