Integrated Curriculum

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Curriculum is not a static document, it is a dynamic process. It has to respond to the changing needs of the society and country. This is even more so for the curriculum of a medical college, which has to respond to the rapid changes that are taking place in the biomedical sciences, and consequently the practice of medicine. The needs of the community are changing, and the demands of the community are changing. The community is becoming better informed, and so their expectations are changing. The questions of equity and cost of health care have become important, and since all these issues have an influence on the practice of medicine, they have also become important for medical education.

It is for these reasons that there can not be a universal or an international medical curriculum for all times to come. The best that can be achieved for purposes of international standardization is an agreed set of objectives (what the graduate should be able to do) and a core content. This is what WHO, ECFMG and World Federation of Medical Education are trying to do[1]. Beyond this there is little agreement on pre-admission requirements, admission procedures. length of studies, instructional strategy or examination methods. For anyone interested in gathering more information on medical education around the world the International Handbook gives a summary of the situation in 28 countries as it existed ten years back[2].

The other major forces which are pushing curricular changes are exponential growth of advancements in the biomedical field and developments in the field of educational psychology, particularly in the area of adult learning, Integration between different disciplines/subjects is a concept which has come out of cognitive studies relating to medical education. When a physician examines a patient he/she has to put together his/her knowledge of the structure and function of the part of the body being examined. Thus, while examining the heart the physician has to keep in mind the information acquired during the courses on Anatomy, Physiology, Biochemistry and Pathology. If this is how the physician is going to use the information why not also teach it in that way .ln other words, instead of teaching Anatomy Physiology and Biochemistry as distinct subjects, in isolation of each other, use a single organ system as the focal point to teach all the aspects of an organ system in one course. Case Western University in States first introduced this form of integration in 1951[3]. Initially integration was between the basic science subjects and in the older literature this has been called as horizontal integration. Integration between Basic Sciences and Clinical disciplines is called vertical integration. However, the term integration covers a wide range of meanings and Harden has recently described the eleven steps of integration as moving from isolation to awareness, harmonization, nesting, temporal coordination, sharing, correlation, complementary, multidisciplinary, inter disciplinary and trans-disciplinary[4].

The present curriculum in Pakistan is a discipline based model which we inherited from British India. In UK this discipline based curriculum has been replaced by an integrated model[5], but in Pakistan the discipline based curriculum is still used by most of the medical colleges. Two medical colleges of Pakistan have taken some steps towards partial integration by adopting an organ system based curriculum for Basic Sciences, while efforts are on to introduce it in four other medical colleges.

In this issue an article describing the experience of one medical college which has introduced the organ based curriculum in Basic Sciences is being published[6]. Using the scale described by Harden[4] the level of integration described in the article being published in this issue will be at the level of co-relation as far as Basic Sciences are concerned but at the level of harmonization when it relates to integration between Clinical and Basic Sciences.

One of the major hurdles in introducing integration is that it requires transfer of control over curriculum

from the departments to a curriculum committee. This is a change that is not acceptable to many departmental heads. Thus, integration is not just a curricular change it is a change in the social structure of the medical college as well.

In the traditional subject/discipline based curriculum the Head of the Department decides what is to be taught, in which order and most important of all the content and format of the examination, There is no attempt to co-relate with the other subject specialists as what the others are doing. This is the system which is presently in vogue in Pakistan. In the integrated system all the subject specialists get together to decide the content of the course, how it is to be taught and how it will be examined. The decisions are based on the relevance of a topic to the needs of the graduating physician, and not on the perceptions of a subject specialist alone, It is this give and take which is missing from the present system and the most difficult part of implementation of an integrated curriculum.

References

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