

MEDICAL EDUCATION

BEING IN THE TRANSITION PERIOD IN MEDICAL EDUCATION: TURKEY EXPERIENCE

Sibel Kalaça, M.D., MPH* / Çağrı Kalaça, M.D.**

* *Departments of Public Health and Medical Education, School of Medicine, Marmara University, Istanbul, Turkey.*

** *Department of Family Medicine, School of Medicine, Marmara University, Istanbul, Turkey*

INTRODUCTION

There are 47 medical schools in Turkey, 39 of which currently have undergraduate medical education. All these schools run their own programs independently. According to the Undergraduate Medical Education Report of the Turkish Medical Association (1), 23 out of 39 schools named their educational system as "integrated", 9 as "classical", 5 as "integrated + active" and 2 schools as "active".

During the last 5 years in response to current challenges to reform medical education (2), a number of medical schools in Turkey initiated a changing process in their curricula as well as revising the educational methods (3,4). Although educational reform movements were initiated with different perspectives and experiences, there have been important similarities between the schools in the features of the change process; such as emphasis on active learning instead of a passive-lecture format, standardization in clinical skills by introducing the clinical skills lab, and early exposure to clinical medicine. Actually many of the changes envisioned at different medical schools had already been introduced elsewhere (5,6).

A very few and "relatively young" medical schools in Turkey decided on "problem based learning" (PBL) as their innovative method and changed their entire curriculum to the new one (1,3), whilst many others preferred to take a "safe" way by implementing PBL or other innovative methods within a number of courses (1,4). There are also some other "deep-seated" medical schools that are satisfied with monitoring this transition period and waiting for the first results. The need to change medical education is however greater in established medical schools, but innovations seem more difficult to achieve there (7).

Keeping in mind that transition period is not completed yet, four types of system/curriculum could be identified in medical education in Turkey at present: classical system (discipline based), integrated system (organ-system-based curriculum), problem based learning (it is called as "active education"), and a mixture of integrated and innovative ones.

As we have been passing through a transition period, this paper has aimed to focus on recently experienced and expected problems of this special period; although there is no published research on this aspect. Investigation of the

problems might provide an opportunity to achieve better response to them.

THE CHANGE PROCESS: PROBLEMS AND EXPERIENCE OF OTHERS

There are important similarities in both the problems and solutions involved in curricular change at any medical school (2, 4, 5). There are some problems and concerns which have been already experienced at the early stage of the process, such as how to know if there is need for a change, how to convince some of the teachers who believe that the old curriculum did not need any change, which model is better, what should be the objectives and structure of the new curriculum, what should be the depth and the speed of the curriculum change, how to overcome expressed (and unexpressed) faculty concerns about time commitment, resource allocation, and promotion, how to cope with concerns over loss of departmental control, how the proposed system can be named, and how to improve the active involvement of students in this change period.

Some of the problem areas are well known due to the others' experience however they have not been studied as required. Therefore it seems that these problems will be experienced similarly by the "observer" medical schools in Turkey in the near future such as: how to identify and fix the mistakes in the management of this change process, how to promote innovation and continued curricular evolution, how to evaluate the effect of the new curricula.

Some of these problems have been discussed in the following sections relative to the situation in Turkey.

1.1. The first focus: Lack of quality in education

For the last 20 years, the number of medical schools and students in Turkey has been rapidly increasing. There were 4 medical schools in 1964, 7 in 1970, 16 in 1975, and 24 in 1989; in 1998 the number became 47. The number of graduates was 426, 778, 1149, 3264 and 4500 respectively (1).

Unfortunately extreme disparities emerged among medical schools as a predictable

outcome of this rapid increase in numbers; particularly with respect to educational resources. For instance the number of reference books in medical libraries per student is 13 in Ankara, 14 in Çukurova, 53 in Dokuz Eylül, 1 in Atatürk, 2 in Dicle, 1 in Trakya and 0 in Süleyman Demirel Medical Schools (1). These facts provoked a "quality in medical education" discussion. The Turkish Parliament founded a commission for the problems of medical education in 1990 (8). It has been demonstrated that most of the young graduates do not feel confident (and worse, are not competent) in many of the common health problems of the community and required procedural skills. Yes, the basic dilemma in medical education was lack of quality in education (1, 3). This was the initiation point for the reform movements in medical education.

1.2. An unexpected outcome of a reproductive health services project: A national movement for "training the trainers"

In 1992 an international project was launched aiming to introduce a competency-based course for family planning methods in undergraduate education by Ministry of Health, in cooperation with Johns Hopkins and Hacettepe Universities. Within this project a "train-the-trainers" programme called "improving training skills of trainers" was put into practice. This programme introduced the competency-based education method, as a part of interactive learning methods. The participants were not only learning the content, but also actively implementing many innovative educational methods within the course programme. A master trainer group was formed at national level supported by advance levels of educational courses. Over 150 professors and lecturers were educated within a few years.

This period played an important role for all parties in understanding the problems of current medical education system, especially problems in teaching methods. It was noticed by some of the schools that the enthusiasm and energy that characterized the early years of foundation were waning. However, a modest course providing the faculty with a methodological and structured experience for a stronger interaction with students, turned out to be a kind of "magic touch".

1.3. The first big step: Dokuz Eylül Medical School

Meanwhile, another important event happened and one of the medical schools (Dokuz Eylül University Medical School) decided to change the system of education to an active one with problem-based learning. The main philosophy of the new curriculum was defined to deal with "biological", "behavioral" and "social" aspects of the whole "life cycle" and complete integration of different disciplines (3).

The decision of Dokuz Eylül Medical School was considered as a reform in medical education and monitored by about 10 medical schools with an interest in adopting similar programmes in the future. However, only one medical school, Pamukkale, among the followers aimed to implement PBL with a curriculum-wide approach.

In fact, we do not know what arguments were used in different schools to prove the need for a change. Dokuz Eylül University, for instance, used general information on the quality of medical education in Turkey and took a decision to establish a curriculum which covered the common health problems and basic needs of people as stated in the Edinburgh Declaration and the Turkish Medical Association (3). Marmara University Medical School has also referred to those two and relied on students' opinions about the status of medical education (4). However, this was not enough to convince who those believed that the old curriculum needed no change.

1.4. The new discussion: The method of change process

Actually, once the decision was made on the direction of reform the second step has been always the same for any medical school: to set up a new curriculum committee. Construction of the new committee has had a central role during the process as much as its products. First of all, the new curriculum committee needed to be more representative than the previous one. However, when we looked at examples in Turkey, it was seen that both old and new committee members were assigned by the dean. This approach caused another discussion on the "method of the change process" in addition to unsatisfactory arguments for the need for curriculum reform and unfortunately resulted in a

somewhat harmful effect on some of the medical schools.

Another problem with the new curriculum committee was that except for a few examples, this assigned group consisted only of faculty members and students were not given a place. However, student feedback was one of the important factors in defining the efficacy of new curricula (9).

It has been usual practice for student opinion to be sought on pre-existing curricula, usually by issuing them with questionnaires. Likewise, several studies have been conducted as an important instrument for students' involvement in the reform efforts in Turkey (4, 10, 11). While this type of feedback plays an important role in curriculum updates and revisions, students are also capable of providing valuable information for medical educators designing new curricula (9).

It must be admitted that some procedural mistakes have occurred during the transition period in Turkey and the widespread inclusion of faculty and students in the process of change have not been achieved.

1.5. Students' motivation, learning, evaluation

One of the important facts is a change in the system of education requires a change in students' learning and studying style. This is actually desirable. It is believed that new system offers many advantages to the students and thus students do much better. However, it should not be forgotten that it is not easy for a student to make a change in learning style, since it was formed early on.

The educational system in Turkey, from primary school, is like the traditional curriculum, lecture-based and competitively graded. There has always been a strong external control, which takes over or substitutes learning and thinking activities from students (12). This created an important difficulty for students when they were exposed to a new system based on self-learning activities.

This might have been experienced even more complicated among the medical students where PBL or any innovative method implemented in

less-broad spectrum approaches. It has been stated that the most critical element that makes single-course implementations of PBL problematic is competition for student attention from courses operated in traditional curricula. Faced with an imminent test or assignment deadline in classic system, students will often forgo activities in a PBL course (13). Actually this situation is the same in Turkey since most of the medical schools have adopted a mixture of the new and old educational system. Furthermore, characteristics of the classic system have been more obvious for the students since these two systems have been run in a very different educational atmosphere.

Marmara University Medical School introduced a number of interactive studying modules within its major organ system based-integrated curriculum in addition to other curriculum changes and has been experiencing some problems related to these changes. One of the problems at the school has been about assessment. Students are being exposed two different systems at the same time. It could be considered an advantage on the one hand since each student might serve as his/her own "identical" control. On the other hand, it would be very difficult to measure the effect of a specific method, since they are not exposed to all aspects of the new system but only some and also each student is influenced by the two methods.

It is well documented that evaluation methods have a large "steering" effect on student learning (14). Without making any changes either in the curricula or in the assessment system, educators may counsel students to avoid studying for the test, saying that the important thing is "really learning" instead of just "passing exams". But it is unlikely that this steering effect will go away. A far more adaptive strategy is to use knowledge of the steering effect to explicitly direct student learning in desirable situation (14).

Different systems have required different types of assessment approach and techniques; however it has been more difficult to achieve this within a mixed educational system. Interactive studying modules at Marmara Medical School have been based on PBL and took a relatively small part in the curriculum. Thus, they cannot defensibly serve as the basis for a pass/fail decision. Yet, it

is known that if they are not used for decision, the steering effect will be lost. What we do is, we evaluate students' effort during the small group work in order to keep steering effect for newly introduced courses (14).

CONCLUSION

Some of the problems of the transition period in medical education in Turkey have been summarized in this paper. It is said that, in medical education "how it is taught" has the same importance with "what is taught". Our experience in Turkey has shown that the same approach could be applied to the process of changing; "how" is as important as "what". Although there are many more problems than presented here, we think they all need the same approach, which is to achieve changes in the "culture" of the school. The culture should be changed in the direction of greater collegial relationship among students, faculty, and the administration rather than the former simple teacher-learner mentality. An innovative curriculum, which aims to promote life-long, self-directed learning, could be better applied where students are considered as adults and where students are more mature.

It is now vital to contact and cooperate with other medical schools and educational bodies to share experiences in order to cope with the problems of the new period and also to improve the active medical education system.

Summary points:

- ✓ **Main reason for change:** The gap between community health needs and the medical curricula
- ✓ **Main problems of the change process:**
 - *Resistance of teachers and students:* some teachers do not believe in need for reform; whilst students have difficulties in adapting their learning styles
 - *Problems in construction of the new curriculum committee*
 - *Lack of students' participation in the process*
- ✓ **Problems of the "mixed systems":**
 - students do not give equal importance to the courses operated in new curricula
- ✓ **Challenge:**
 - to achieve changes in the "culture" of the school.

REFERENCES

1. Turkish Medical Association. Undergraduate Medical Education Report. 2000. www.ttb.org.tr/MOTER.
2. Moore G, Block SD, Style CB, Mithcell R. The influence of the new pathway curriculum on Harvard medical students. *Acad. Med.* 69 (12) Dec 1994;69:983-989.
3. Elçi ÖÇ, Aksakoğlu G. Dokuz Eylül joins the family: active medical education. Letter to the Editor. *Med. Educ.* 1998;32:222-223.
4. Kalaça S, Kan B, Güney I, Çakın A, Tözün N. Students' perception about medical education at Marmara University School of Medicine. *Marmara Med. J.* 2000;13:131-136.
5. Finucane P, Nicholas T, Prideaux D. The new medical curriculum at Flinders University, South Australia: from concept to reality. *Med. Teach.* 2001;23:76-79.
6. Bernier GM, Adler S, Kanter S, Meyer WJ. On changing curricula: Lessons learned at two dissimilar medical schools. *Acad. Med.* 2000;75:595-601.
7. Van Damme W. Change in undergraduate medical education. *Annales de la Societe belge de medecine tropicale* 1995; 75 Suppl 1:57-66.
8. Turkish Parliament Research Commission. *Medical Education in Turkey. Volume 1: Student Aspect.* Ankara. 1991;125-126.
9. Huppertz C. The Essential role of the student in curriculum planning. *Med. Educ.* 1996;30:9-13.
10. Cankur N Ş, Turan S. Medical education from students' perspective: I- Educational Aspect. *Bulletin of Uludag University Medical School. Bursa. Vol. 26 (1-2-3) (1-2): 13-17, 1999-2000*
11. Akçiçek F, Saçaklıoğlu F, Sözmen E, Kandiloglu G, Demirgören S, Sayiner A. Improvement process of the Medical Education in Ege University Medical School. *Bulletin of Ege Medicine, 1999 Feb; No:13, 2-3.*
12. Vermunt JD. Metacognitive, cognitive and affective aspects of learning styles and strategies: A phenomenographic analysis. *High Educ* 1996;31:25-50.
13. Albenese M. Problem based learning: why curricula are likely to show little effect on knowledge and skills. *Med. Edu.* 2000;34: 729-738.
14. Evaluation methods: A resource handbook. Mc Master University. Program for Educational Development, Program for Faculty Development and Educating Future Physicians of Ontario (EFPO) Project. 1995:1-10.