Debate

Continuing medical education in Turkey: Recent developments
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Background: The Turkish Association of Medicine founded a Continuing Medical Education Accreditation Committee in 1993 to evaluate and accredit scientific meetings and publications. The aims of this project were to raise the standards of meetings and to introduce compulsory revalidation and re-certification for physicians in Turkey.

Discussion: Since the year 1994, 2348 applications to the Continuing Medical Education board have been made (mostly for scientific meetings), and 95% of these applications have been accepted. Physicians received 139.014 credits during this time. This number is increasing every year. Meeting organisers’ demand for such a kind of evaluation is increasing, because participants increasingly request it.

Summary: Efforts for revalidation and re-certification of physicians have not been completely successful yet. In the near future the Co-ordination Council of Medical Speciality Societies is going to oblige member associations to establish specialty boards. This will be the first step to the conventional use of Continuing Medical Education credits in occupational evaluation. Time-limited re-certification of physicians is the principal goal of Turkish Medical Association. Efforts to implement this change in legislation are being made.

Background
The Turkish Medical Association (TMA) has worked for many years on the idea of developing strategies that would contribute to raising professional standards for all Turkish medical doctors. Continuing medical education (CME) is essential in a country with an unequal geographic distribution of wealth and health resources, in which most of the doctors work in cities located in Western Turkey. Although medical education programs in Turkey are innovative and internationally acknowledged [1], it is very clear that basic and clinical medical sciences will expand exponentially and the technology and practice of medicine will change greatly with time. Therefore the body of knowledge in all medical scientific fields will accumulate, so that it will be impossible for any medical doctor to be aware of all of the new technology and knowledge in his field [2].

Another outstanding problem is that the doctor himself cannot appreciate his/her needs sufficiently to maintain a base of current medical knowledge. Therefore all doctors should be encouraged to improve their medical knowledge and skills by means of Continuing Medical Education (CME).

Medical care in Turkey
Turkey is a gateway between Europe and Asia, both geographically and culturally. With its population of 63 mil-
The health indicators in Turkey are not satisfactory, given its level of socio-economic development. Life expectancy at birth is 69 years (1998) [3], infant mortality rate is 43 per 1000 in 1998 and under-5-year mortality rate is 52 per 1000 (1998). Maternal mortality rate is about 130/100000 (years 1980–98) [3].

31,000 medical students are presently attending 41 state and 6 private universities. At the present time, the number of new graduates is around 4,600 per annum [5]. Thus, a common idea prevails that there are too many doctors graduating from medical school, and medical unemployment is just around the corner. The Turkish Medical Association called for an urgent reduction of graduates to 2,500 in a speech at the 8th 5-year development plan government meeting, but no significant reduction of medical education quotas has been achieved yet [6].

Most health care services are provided by the Ministry of Health. Workers and their families' health are covered by the Social Insurance System, and the Medical Schools provide superior and sophisticated medical care. Funding of health care is again largely governmental.

According to Ministry of Health records, 77,000 doctors are employed in governmental and private institutions. 34,000 of these physicians are specialised in a medical field and 43,000 are general medical officers (medical school graduates with no residency training) and residents in postgraduate training [3].

**Description of the CME Accreditation Committee (CMEAC)**

The Turkish Association of Medicine (TMA) founded a CMEAC in 1993 to evaluate and accredit scientific meetings and publications. The aims of this project were to raise the standards of meetings and to introduce compulsory revalidation and recertification for physicians in Turkey. Although providers of CME activities do not need any approval from the CMEAC, increasingly doctors' expectations of CMEAC-accredited scientific activities forces providers to apply for evaluation. If they meet the prescribed standards, their activities are approved. Prescribed conditions of the Turkish CMEAC are applications for accreditation at least one month ago, meeting scientific criteria (should be activities like congress, symposium, seminars, workshop, courses etc. and organising person or president of the activity must be an recognised academician with reputation), and payment of accreditation fee (the value of the activity must be an recognised academician with reputation, and payment of accreditation fee (the value of the activity must be an recognised academician with reputation, and participation for this activity). Pharmaceutical industry is not allowed to apply for accreditation of their activities. Applicants receive one CME credit point for each formal or active lecture hour. In addition, each practical session hour is awarded one credit. Furthermore, three Turkish medical journals are accredited and in future even lecturers are going to be evaluated by the CMEAC. Doctors attending these approved CME activities or filling out journals’ multiple choice tests are awarded with CME credits, and these are registered with the CMEAC.

The CMEAC consists of 9 members, with representatives from the TMA (3 members), medical schools (2 members), Ministry of Health (2 members) and Societies of Medical Specialists (2 members). This committee meets at least once every three months and decides on approval or otherwise of applications. This program is implemented through the TMA’s central office in Ankara.

**Resources**

CME providers have to pay the amount of one participation fee to the committee for being evaluated. Doctors attending these CME activities pay a fee and thus directly support their CME activities. However, the industry supports the majority of the activities, too. Activities performed by local branches of the TMA and free CME activities are accredited without any evaluation fee. Payments are made to the TMA. The human resources required by the accreditation program are the members of the Committee, one assistant (junior physician), and one secretary. Only the secretary is paid. The TMA uses its administrative organisation for the financial administration of the CMEAC.

**Outcomes of CME accreditation programme**

**Acceptability of the CME accreditation programme**

Although CME providers are not obliged to apply for accreditation by CMEAC the number of applications is rising steadily (Table 1). Efforts of organisers to improve the quality and attractiveness of CME activities, and the increasing demand of physicians to gain CME credit points might be the reasons.

Approximately 95% of applications have been accredited to date. A decline of refusals can be seen from 1994 to 2000. Applicants might have become familiar with application rules in this period. Since direct applications from the pharmacological industry are not accredited for ethical reasons, their applications have also been decreasing during the last few years.

**Distribution of applying institutions**

Most of the CME activities have been organised by academic institutions, like medical schools and state teaching hospitals (40.6%). The efforts of the TMA to make accredi-
itation by CMEAC popular can be seen especially in the first year. An increasing trend for applications to the CMEAC can also be seen in the societies of medical specialities and other organisations like private institutes, private hospitals, laboratories etc (Table 1).

**Distribution of audiences**

Excluding the first year the ratios of both audiences (medical specialists and primary care physicians) seem grossly unchanged. Nevertheless a slight increase in the activities of medical specialists can be observed (Table 1). Organisation of sophisticated, specific and technological activities for special groups, which has emerged in recent years, might have changed the ratio in favour of the medical specialists. More and more providers try to provide activities for larger audience groups of with a broad spectrum of topics and subjects, so as to attract both specialists and primary care physicians.

**Discussion**

The medical profession has a duty to produce the best possible medical care for citizens. Clinicians should be up-to-date and provide the best possible care. In order to uphold higher standards, doctors should continue to learn throughout their working lives. Therefore the value of doctors participating in CME activities and receiving credits for them is universally accepted and non-controversial [7]. Although relative weak effect of formal planned CME on physician performance has been demonstrated [8], the ultimate effect of formal CME activities on physician performance must be understood in type of the delivered CME method. New evidence suggests activities with active learning opportunity, learning delivered in a longitudinal or sequenced manner, and the provision of enabling methods. It is also stated, that didactic CME modality has little or no role to play [9]. Therefore, new efforts are being made to integrate active learning sessions into their scientific activities by providers to enhance effectiveness of CME. Time will show their effect on medical care.

Although there is a wide variation across systems for CME in different countries, there are some similar features, including that one hour educational activity is awarded with one credit, and the types of educational activities. These educational activities can be divided into external activities (courses, seminars, meetings etc.), internal activities (case conferences, practice based activities, journal clubs etc.) and enduring materials (journals, CD ROM, web based materials) [10]. A survey of 18 European countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, United Kingdom, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, and Switzerland) revealed that CME is voluntary in 12 countries, and obligatory in 17 countries; that the responsible organisation is mostly the medical profession (n = 13); that 9 countries use credit based CME activities, that in no countries examinations are performed; that only in one country CME is used for re-certification purposes. No European country has followed the re-certification model of the United States of America (USA) [11]. The Canadian CME system encourages physicians to manage their own CME by attending a competence programme. They are required to report on their CME activities in a five-year cycle. Fellows are required to earn 400 credits during this period. Credit is mostly based on

| Year | Application Accepted | Total (n) | Universities and Teaching Hospitals | Medical Societies | TMA | Others | Medical Specialists | Primary Care | Both |
|------|----------------------|----------|-------------------------------------|-------------------|-----|--------|---------------------|-------------|------|
| 1994 | 28                   | 24       | 86.7                                | 5                 | 20.8| 8      | 33.3                | 10          | 41.7 |
| 1995 | 136                  | 113      | 83.1                                | 57                | 50.4| 39     | 34.5                | 12          | 10.6 |
| 1996 | 255                  | 253      | 99.2                                | 121               | 47.8| 58     | 22.9                | 51          | 20.2 |
| 1997 | 429                  | 421      | 98.1                                | 151               | 35.9| 85     | 20.2                | 140         | 33.3 |
| 1998 | 469                  | 469      | 100                                | 216               | 46.1| 83     | 17.7                | 137         | 29.2 |
| 1999 | 500                  | 493      | 98.6                                | 193               | 39.2| 122    | 24.8                | 145         | 29.4 |
| 2000 | 531                  | 529      | 99.6                                | 234               | 44.2| 129    | 24.4                | 124         | 23.4 |
one hour's activity. Specialists who successfully complete the programme are awarded a certificate by their society [10,12]. CME in USA is related to re-certification. Re-certification may be required especially by medical societies, insurers, health maintenance organisations and hospitals. CME activities are divided into two categories: Category 1 (formal programmes, journal based or enduring materials, international conferences etc.) and Category 2 (small group discussions, journal clubs, teaching, writing etc.). 

Credits are based on activity hours, and CME activities are provided by colleges, associations, academies, faculties and societies of different medical specialities [10,13]. Programmes in Australia and New Zealand are directed by medical colleges and faculties and the programmes are based on self-reporting by physicians. Most of the programmes are mandatory and are organised in continuous 3–5 year cycles. Credits are allocated for CME activities using an hours-related credit system [14]. In New Zealand participation in a recognised programme is mandatory in order to retain specialist registration. In Australia, current legislation does not require physicians to participate in CME activities [10].

Limitations to participate in CME activities are that neither private nor state-employed doctors are supported by their employers. If the doctor does not have any pharmaceutical industry support, he must pay for the CME activity. Because CME providers often choose luxurious hotels and expensive convention centres, doctors often can not finance these activities. The TMA strives to change this approach by means of its ethics committee and other related working parties. Same problems with ethical issues exist in the USA. Rosner states, that ethical relationship between doctors and the drug industry require guidelines to maintain the integrity of the medical profession [15]. Acceptance of subsidies for the cost of CME conferences could be considered ethically acceptable, if the gifts are of minimal value and the control of content and the selection of presenters and moderators rest solely with the CME-sponsoring institutions [15,16]. Another problem is that, doctors working for the state have problems in obtaining study leave. They have to use their vacation time to attend these activities. The Turkish Ministry of Health has to be convinced to change its policy.

There are plans for making participation in CME activities obligatory, to make the CME credits useful. The Co-ordination Council of Medical Speciality Societies in Turkey is now forcing its member societies to prepare their boards. By making CME credits an obligatory part of the board examination, this will be the first step to use these credits in the certification and re-certification of the doctors in Turkey. Recognition of disparity in doctors’ skills and the need to maintain common core standards have been the main reason for re-certification by the American Board of Medical Specialities in USA. Although re-certification is a voluntary process, doctors have to get re-certified every seven to ten years, because the board certification has become essential to admit patients to hospitals and to receive top salaries as a specialist. Most of the boards use a written examination to assess knowledge, skills and performance. Half of the American Boards (n = 11) require 50 hours a year participating in CME activities for three years before re-certification [17]. Re-certification in the USA has a drawback. It is not cheap. Site visits, examinations using standardised patients, and case recall interviews have been found to be too expensive or impossible to implement with the huge number of doctors in the USA. Outside the USA most countries do not incorporate formal "snapshot" examinations into their re-certification procedures. The initial certification is based on in-training evaluation over many years [18]. The same approaches are now found in some Societies of Medical Specialities (General Surgery, Neurosurgery, Respiratory Medicine, Family Medicine) in Turkey.

The colleges in some countries offer mostly formal education programmes after postgraduate training in a medical speciality. Usually, 50 hours attendance in CME activities at recognised courses per year are required for re-certification. In Canada weighted credit systems have been established where traditional didactic sessions are rated 1 credit per hour and interactive workshops receive 2 credits per hour [12,18]. In Australia, re-certification criteria are related more closely to physician's performance than attendance at traditional CME activities. Participation in quality improvement activities like audit of practices and formal CME activities are required. The Royal Australasian College of Physicians has also a peer- and patient rated assessment programme, where the doctors’ clinical management and personal skills are assessed [19].

On the other hand, Holm [20] claims that maintaining clinical competence might not be effected by strict legislative and regulatory measures. Reliable and valid identification of incompetent doctors may require well-planned and rather expensive programmes. And he further adds, that CME is hardly a solution for these persons.

As can be seen there is no wide consensus, concerning programmes and re-certification. A portfolio-based learning system has been proposed, where doctors could meet the speciality board requirements by setting up their own learning plans [21]. The Canadian Maintenance of Competence Programme (MOCOMP) and a programme appointed by the Royal College of General Practitioners in Britain are the first portfolio-based learning approaches.
Fox and Bennett [13] suggest the following implications for the future of CME: (a.) Self-directed curricula designed by each doctor to incorporate new knowledge might be useful; (b.) Learning in groups serves as a source of interaction and will help to shape the practice of medicine; (c.) Learning within learning organisations is necessary, because these organisations create standards that govern practice and fit local problems and needs.

Summary
As can be seen there are still doubts concerning the ideal model of CME. Turkey is still at the beginning of this process and has still a chance to make use of the experience of other countries, which are intensively involved in this process. But the primary goal of the TMA and The Coordination Council of Medical Speciality Societies are time-limited re-certification using the most contemporary and effective method. To fulfil this goal, legislation is necessary and the TMA is lobbying for it. At present the only authority for regulation and registration of doctors is the Turkish Ministry of Health, whose co-operation and support is vital [22]. Politicians must be persuaded of the importance of CME and the resulting benefits for health care.

Competing interests
None declared.

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