Continuing Professional Development in the Health Sector

Fereidoun Azizi M.D.

INTRODUCTION

As Prophet Mohammad (PBUH) said "Seek knowledge from cradle to grave", the concept of continuing education (CE) has been promoted in the last few decades to provide the means whereby people can develop to their maximum potential and to improve well-being and to ensure a high quality of life for all.

It is well stressed that the new millennium will be "knowledge-based". Those who can acquire, understand and apply knowledge will prosper and those who cannot will lag behind (1). Therefore, the importance of lifelong learning and CE in all kinds of formal, non-formal and informal education systems is evident.

CE for health personnel represents a crucial challenge for the development of a health system, which is culturally and socially relevant and economically efficient.

It is also crucial to the improvement of the health status of the people and to the quality of life in general (2). Internationally, there is a move from continuing medical education (or clinical update) to continuing professional development (CPD), including medical, managerial, social, and personal skills. There is no sharp division between CE and CPD, as during the past decade CE has come to include managerial, social, and personal skills, topics beyond the traditional clinical medical subjects. The term CPD acknowledges not only the wide-ranging competences needed to practice high quality medicine but also the multidisciplinary context of patient care (3). It is also a recognized fact that the management of the health system can be made much more effective if all categories of health personnel undergo CPD and if the supervision of health workers becomes part of the educational process. Appropriate CPD should provide a bridge between basic training and practice. When integrated with supervision, it helps to raise the standards of health care and leads to more efficient work conditions (4).

The importance of CE has also been illustrated by imagining what would happen if the health workforce had no access to CE programs after completion of the initial training. The topics which should be considered include: inadequacy of initial training for provision of optimal health care; forgetting and deterioration of skills with time; negative influences present in everyday clinical practice; and ignorance of developments in health care techniques. Taking these four lines of argument together, there can be no doubt that effective provision of CE is absolutely essential in any health care system (5).

TYPES OF CE ACTIVITIES

Continuing education is any activity or event, which is designed to improve the knowledge, skills or attitudes of health workers. A consultative meeting on CE arranged by the World Health Organization (WHO) at Srinagar in 1983 (6) designed a comprehensive list of methods (Table 1).

CE activities may be divided into three categories (3): "live" or external activities (courses, seminars, meetings, conferences, audio and video presentations); internal activities (practice based activities, case conferences, grand rounds, journal clubs, teaching, consultation with peers and colleagues); and "enduring" materials (print, CD ROM, or web based materials).

Table 1. Comprehensive List of Activities in Continuing Education of the Health Workforce

On the Job Methods	*Off the Job Methods*
Health care audits	Distance learning
Job rotations	Academic studies
In-service training	Training courses
On-site supervision and guidance	Self study
Journal article review club	Guided studies
Team assignments and projects	Seminars and workshops
Review of patient records, monthly reports	Conferences
Colleagues	Meetings of professional organisation
Telephone conferencing	Meetings of scientific societies
Staff meetings and conferences Distance learning	Computer softwares, Internet

SOURCE: Adapted from Abbatt F, 1988 (6).

In most countries there is some kind of CE system. This system consists of all the organisations and people who are involved in managing and providing CE, the relationships between the organisations and people and the regulatory or legislative framework within which they work.

In many countries, the relationships are weak and poorly defined. There is inadequate understanding of the concept of CE as an opportunity to engage in lifelong learning, inadequate appreciation of the role of CE in personal and socio-economic development, poor co-ordination and lack of networking among the varied agencies providing CE, and low level of co-operation between government agencies, non-government agencies and the private sector in the provision of CE. The consequence is that the actual continuing education, which takes place, is piecemeal and fragmented. Inevitably the impact of CE on the way in which health care is provided in this type of system is limited. In some countries, the relationships are clearer and there is much greater co-ordination. Here the impact is greater. In this kind of situation one can define a National Training Activity (NTA) or a National Programme of Continuing Education (NPCE). This does not mean that all activities are implemented by a single organisation, not that there is a single source of funding: it merely means that funds and activities are coordinated towards achieving a common purpose in an effective way.

There exist systems for professional development in many developed countries. In Europe, There is a diversity of systems operating for CPD. Save for Netherlands, no European country has followed the US model of examination or recertification (7). However, variable incentives are introduced by Belgium, Norway, Italy, Luxembourg, Portugal and United Kingdom (3). In Canada, the maintenance of competence program and innovative self-learning programs encourage clinicians to manage their own CE. Specialists are required to report their activities for CPD every five years (8). Continuing medical education in the United States is closely related to recertification (9). Recertification may be required, for example, by medical societies and associations, health maintenance organisations, insurers, and partners in medical practice. Programs in Australia and New Zealand are managed by the respective medical colleges and faculties and provide self-directed learning for CPD members (10). Available information on CPD in developing countries are scarce (11,12). Most activities are on

ad-hoc basis and do not operate within a specific framework of national plan. Countrywide program of CPD has been reported in some of developing countries for all health personnel (11) or for defined specialties (13).

EFFECTIVENESS OF A CE PROGRAM

There are two major aspects of CE which determine whether it is successful or not. The first is the quality of the CE methods themselves: the assessment of needs, the design of the course of individual session, the quality of the teaching learning materials, and the techniques used by the teacher or facilitator. These factors determine how much is learned during the CE activities. The second aspect is the context or system in which the CE takes place. It is, in general, the context or system, which determines whether learning during a CE activity is translated in improved work performance in the field situation.

EVALUATION OF A CE PROGRAM

According to a WHO definition a national training activity (NTA) is a measurable short-term educational activity, relevant to priority health needs, carried out within a country, which aims to upgrade the knowledge, skills, and attitudes of the participants, improves health care delivery, and builds up the capacities of health and health-related personnel at all levels of the health care system. Evaluation of a CE program may be directed towards the change in knowledge, attitude and practice of participants or towards complete assessment of effectiveness of the CE system.

EVALUATION OF THE PARTICIPANTS

Different methods have been used for evaluation of participants in CE systems, including administration of pretests and posttests to assess the change in knowledge of the participants, and evaluation of the performance of the health workers after participation in the CE program. Although these two methods have been widely used for evaluation of effectiveness of CE programs in different settings, some concerns have been raised about their optimal function, because the results of the former approach is shown to be inconsistent with the practice of participants in the field, whereas the latter is influenced by numerous factors other than CE program input and,

therefore, can not be a reliable indicator of the effectiveness of the program (14).

EVALUATION OF THE CE SYSTEM

Conflicting pieces of evidence exist about CE of physicians in the current literature (14-16). It has become evident that didactic sessions or traditional CE approaches such as lectures are not effective in changing physician performance (17). However, interactive CE sessions that enhance participant activity and provide the opportunity to practice skills certainly bring about change in professional practice and, on occasion, health care outcomes. Abbatt has proposed eight principles underlying an effective CE program (18). We have slightly modified Abbatt's principles by addition of two other principles (19) (Table 2).

Table 2. The Principles of an Effective Continuing Education System

There should be a national policy on CE
There should be a single agency with overall responsibility for managing CE
There should be a network of partner organisations with clearly defined roles.
The amount of CE should be appropriate
The objectives of the CE must be prioritized and stated in terms of improved work performance
The capacity to develop materials and implement CE activities should be matched to the need
The innovative, active and appropriate methodology of education should be employed
CRISIS (convenience, relevance, individualization, self assessment, interest, speculation and systemic) should be considered in CE program[20]
CE should be linked to management/supervision support
CE activities and the overall system of continuing education should be regularly evaluated

COUNTRY EXPERIENCES

The author has reviewed CE programs in two countries of eastern Mediterranean region of WHO, and has used the Abbatt-Azizi principles to evaluate both systems.

Although CE has always been recognized as an essential strategy for maintaining the effectiveness and high quality performance of all categories of health personnel, the first Continuing Education for Health Professionals Act was passed in 1991 by the Islamic Consultative Assembly (i.e. the Parliament). From 1991 to 1996, the act covered the following five categories of health personnel: physicians, pharmacists, dentists, laboratory specialists and public health physicians. In April 1996, the act was made permanent, covering all other categories of health personnel, notably nurses, midwives, laboratory and X-ray technicians, dental technicians, optometrists, and many others. It is now mandatory that all health personnel undertake approved CE programs as a prerequisite for relicensing.

The act also established a national council and provincial councils for CE and entrusted these councils with the planning, conducting, and evaluating all CE programs. The unique feature of the Iranian health care system that has helped the development of CE system is the integration of medical education and health services in one ministry.

In 1985, after considerable discussion and debate, the Ministry of Health and Medical Education was established. This merger has undoubtedly benefited the two systems and has resulted in the production of new categories of health personnel who are well trained and sensitive to community health needs (21). The backbone of the system is a network of health houses and primary health care centers (rural and urban) that provide basic health care services at the community level. Health houses and primary health care centers are supported by district health centers and district hospitals. The regional health organisation supervises co-delivery of health services at the provincial level. In all provinces, the chancellor of the medical university is also the executive director of the regional health organisation. At the national level, the Ministry is in charge of policy-making and overall planning and leadership, and also supervises the regional health organisations and universities of medical sciences and health services (22).

The integration of education and delivery of service and the enactment of the law concerning CE are essential backbones of the Iranian health care system. The creation of a department of medical education and the subsequent organisation of activities at the university level are important positive features of the program (11). More than 2000 CE

activities occurred between 1991 and 1996, and analysis has shown that the numbers increase year after year (Table 3).

Table 3. Continuing Education Activities in the Islamic Republic of Iran,1991-96

Type of activity	*Number*
All programs	2140
N°. of participants	428000
N° of locations	190
Composed programs	35
Seminars and congresses	627
Workshops	392
Preventive	227
Research methodology	39
Educational	126
Conferences	275
Short-term courses	117

In order to evaluate the effectiveness of this system, Abbatt-Azizi Principles were applied to evaluate the CE program in I.R. Iran (Table 4).

Table 4. Evaluation of CE program in I.R. Iran using Abbatt-Azizi Principles

Principle	*Score**
National policy	10
Responsibility	9
Network of CEHP†	9
The amount and extent of CEHP	10
Priorities	6
Appropriateness	7
Methodology	4
CRISIS	7
Support by the government	10
Evaluation	5
Total	77

* For each principle scoring of 0 to 10 was used.

† Continuing education for health personnel.

Considering that national CE activities started in Iran about 9 years ago, achievement of such a high score would be considered a remarkable success of the program. Certain deficiencies exist in needs assessment, using

state-of-art educational techniques, and evaluation of the impact and outcome of the programs. There is a need to introduce more innovations into the teaching methodology used in many training activities, i.e. to deviate away from the lecture-type training and use recent approaches in education such as case studies, problem-solving and self-learning methods. Advantages and strengths of this program should be used as a model for formation of national CE programs in other countries.

THE STATUS OF CE IN ANOTHER COUNTRY OF THE REGION (NAME NOT STATED)

In this country, the Ministry of Health has recognized the importance of on-the-job training and has increased the number of such activities in recent years. But it has been observed that most of these activities were performed on an ad-hoc basis and did not operate within a specific framework or national plan. There are no uniform guidelines, administrative or legal basis to control the process of CE at a national level. Additionally, participation in CE programs is voluntary and therefore no clear incentive exists for health personnel to undertake CE at any point in their professional career. Participation in CE programs is by no means a prerequisite for career development, professional advancement, or renewal of medical practice license. The Ministry of Health has not dedicated a separate budget line for CE, and adequate funding is usually available from WHO and other international and non-governmental organisations. Abbatt-Azizi principles were used to evaluate the CME program in this country and the results are shown in Table 5.

Table 5. Education of CME program in a country of Eastern Mediterranean region

Principle	*Score**
National policy	10
Responsibility	9
Network of CEHP†	9
The amount and extent of CEHP	10
Priorities	6
Appropriateness	7
Methodology	4
CRISIS	7
Support by the government	10
Evaluation	5
Total	77

* For each principle scoring of 0 to 10 was used.
† Continuing education for health personnel.

CONCLUSIONS

CPD has been viewed as an effective mean of successful management of any health system and mandatory professional development programs are employed in many countries internationally. While the importance of CE has always been recognized, the need for it now is more crucial in order to respond to unprecedented challenges resulting from new health problems, new technology, and a completely different health scene. The rapidly increasing cost of health care and higher public expectations are additional pressing factors. In economic terms, investment in CE is an assurance that the investment in basic education will bear fruit. With all advantages of CPD, its effectiveness depends on many factors. The impact of CPD may be improved by applying principles that ensure the appropriate change in knowledge, attitude and practice of health workers.

REFERENCES

1. UNESCO-APPEAL. (1997). *Challenges of education for all in Asia and the Pacific and the APPEAL response.* Barykoh: UNESCO Principal Regional Office for Asia and the Pacific.
2. WHO-EMRO. (1992). *Report on the first regional meeting on continuing education for health personnel.* Tunis, Tunisia, 14 June.
3. Peck, C., McCall, M., McLaren, B., Rotem, T. (2000). Continuing medical education and continuing professional development: international comparisons. *British Medical Journal,* 320, 432-435.
4. WHO-EMRO. (1995). *Meeting Report on developing a national system for continuing education for health personnel.* Alexandria, Egypt, 24-27 July.
5. Abbatt, F. (1998). *Principles and prospects for continuing education in the health sector. Symposium on improving continuing education for health personnel in the region*. Tehran, Islamic Republic of Iran, 16-19 August.
6. Abbatt F, Mejia A. (1988). *Continuing the education of health workers.* Geneva: WHO.
7. Joint Center for Education in Medicine. (1993). *Good CPD guide*. Sutton, Surrey: Reed Health Care, 23.
8. Royal College of Physicians and Surgeons of Canada. (1999). *1998 Annual report of the Royal College of Physicians and Surgeons of Canada*. Ottawa: RCPSC.
9. American Medical Association. (1999).*The physician's recognition award*. Chicago: AMA.
10. Royal Australian College of Physicians. (1999). Review of the maintenance of professional standards program. (Internet Communication, October 1999, www.racp.edu.au)
11. Moustafa, A. T.(1997). *Report on Continuing Medical education in the Islamic Republic of Iran.* WHO/EMRO.
12. Azizi, F. (1999). *Report on national training activities for continuing education in Sudan*. WHO/EMRO, November-December.
13. Lejarraga, H., Ageitos, M. L., Galli, A., Castro, C. (1998). A countrywide programme of continuing professional development in Argentina. Argentine Society of Pediatrics, Subcommittee of Continuing Pediatric Education. Archives of Diseases of Childhood, 78, 562-566.
14. Davis, D. A., Thomson, M. A., Oxman, A. D., Haynes, B. (1995). Changing physician performance. A systematic review of the effect of continuing medical education strategies. *JAMA,* 274, 700-705.
15. Grimshaw, J. M., Russell, I. T. (1993). Effects of clinical guidelines on medical practice: a systematic review of rigorous evaluations. *Lancet,* 342, 1317-1322.

16. Bero, L. A. *et al.* (1998). Closing the gap between research and practice: an overview of systematic reviews of interventions to promote the implementation of research findings. *British Medical Journal,* 317, 465-468.
17. Davis, D. *et al.* (1999). Impact of formal continuing medical education: Do conferences, workshops, rounds, and other traditional continuing education activities change physician behaviors or health care outcomes? *JAMA,* 282, 867-874.
18. Abbatt, F. (1998). *Guidelines for the development of national programmes of continuing education for health personnel.* Symposium on improving continuing education for health personnel in the region. Tehran, I.R. Iran: WHO-EMRO.
19. Azizi, F. (1999). Evaluation of continuing medical education in I.R. Iran. *Journal of Medical Council of Islamic Republic of Iran*, 16, 304-310.
20. Harden, R. M., Laidlaw, J. M. (1992). Effective continuing education. The CRISIS criteria. *Medical Education*, 26, 408-422.
21. Azizi, F. (1997). The reform of medical education in Iran. *Medical Education*, 31, 159-162.
22. Marandi, A. (1996). Integrating medical education and health services: The Iranian experience. *Medical Education*, 30, 4-8.