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Special Paper

Continuing Medical Education in Oncology in Europe

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SUMMARY

A EUROPEAN Conference on Continuing Medical Education (CME) in Oncology was designed and organised in Dublin (Ireland), on 12th and 13th October 1995 by the European School of Oncology in collaboration with University College Dublin and with the financial support of the European Commission (*Europe Against Cancer Programme*). Two experts were invited from each Member State and all attended the Conference with the sole exception of the representatives of Luxembourg, who did not attend due to unexpected important commitments. Observers were invited to contribute to the discussion as representatives of organisations that were involved either directly or indirectly in CME. The Conference took the format of a plenary session coupled with the identification of five discussion groups formed to debate key areas in CME at a European level in oncology (Table 1). As a result of these discussions and subsequent consultations, an agreement was reached on the following statements:

(a) Continuing Medical Education (CME) is an ethical duty and an individual responsibility for each doctor. Although CME should remain voluntary at the present time, it is nevertheless a professional obligation since almost 50% of medical knowledge becomes obsolete

after ten years. It should be organised with clear guidelines for medical personnel working in hospitals, in primary health care and in private practice.

- (b) The CME system within the European Union (EU) should remain self-directed without the necessity for interval examinations: it should be interdisciplinary and must be driven and controlled by the profession itself.
- (c) A common concept and system within a CME framework may have a considerable impact on EU integration. It should certainly be developed, maintained and monitored at national level but on the basis of a common European model to ensure scientific and cultural interchange among Member States.
- (d) It was agreed that a credit system is needed to help doctors keep track of their CME activities: the system should be based on the accumulation of credit points (one credit equalling one hour of continuing medical education) and monitored at a national level. Credit transfer among Member States is vital to facilitate exchange between Member States.
- (e) Oncology provides a very useful model of CME within which guidelines can be proposed and tested. Harmonisation of CME systems among the different European cancer organisations and scientific societies within this model system may represent a useful basis that other specialities can follow.

Table 1. Structure of the CME Conference

- Invited delegates from each Member State
- Plenary session
- Five Working Groups:
 - Structure of CME and co-ordinating authority
 - CME availability, assessment and accreditation
 - Financing of CME
 - Quality assurance and European co-ordination
 - Oncology: the need for an interdisciplinary CME

STRUCTURE OF CONTINUING MEDICAL EDUCATION (CME) AND CO-ORDINATING AUTHORITY

The remit of this group was to discuss and formulate some concepts on the structure of CME and co-ordinating authority for CME in oncology throughout Europe. In looking at the structure of CME, it was important to identify the various groups and their individual needs in relation to CME in oncology.

Three groups were identified for whom CME in oncology would be important. The first of these were the general prac-

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tioners for whom a core content of basic oncology should be included in their CME programmes. Emphasis for general practitioners should be placed on prevention and early detection of cancers. In its implementation, close liaison would be required with the controlling bodies for CME for general practitioners. A second group who would require CME in oncology are the non-specialists working in hospital practice who frequently treat patients with cancer. In the provision of CME for this group, factors such as geographical isolation, busy emergency rotas and lack of protected time for CME would have to be taken into account. In this context, the specialist oncology societies would be the major providers of CME educational opportunities for this type of specialist. The third group for whom CME in Oncology is relevant are of course oncologists themselves. In this context, the oncologists would be both providers and participants in the CME educational events.

In the specific context of defining a structure of CME for the oncologist (here meant as doctors treating cancer patients in the broadest sense, i.e. surgeons—with different specialities as gynaecology, lower gastrointestinal tract, breast, etc.—specialising in cancer treatment, medical oncologists, radiotherapists, etc.), it was agreed that CME should be a voluntary activity, but very much along the lines of a professional obligation. It was felt that examinations in the monitoring of this system would not be acceptable to members of the profession or indeed necessary. A credit system would be required to help doctors keep track of their CME activities, and a minimal acceptable standard would be 50 credits per year with one hour equalling one credit. In addition, it was felt important that an equal breakdown of local and national or international activities should be recommended. This would ensure that specialists would continue educational activities in their home base and also show interest in travelling to other centres either within their country or outside it. The group recognised that the majority of practising oncologists are already fulfilling very significant requirements for continuing professional development. The credit system is merely a visible demonstration to the public, the politicians and peer groups that these educational activities are ongoing. The credit system should not be interpreted in any way as restrictive or a mechanism for control.

In relation to a co-ordinating authority, the concept suggested in the UEMS (Union Européenne de Médecins Spécialistes) charter seemed appropriate to the group [1]. It is essential that CME be driven and controlled by the profession and that a co-ordinating authority would be a nationally based organisation. This could be comprised of representatives from universities, colleges, medical faculties, specialists' societies and medical council representatives. Each speciality would have a sub-committee responsible for its activities and under this heading there would be a sub-committee for oncology. The remit of this committee would be to ensure the development, maintenance and monitoring of CME for oncology specialists, and to ensure the adequate availability of educational events in Oncology. This committee would be responsible for overseeing the credit system and also for ensuring quality control on educational activities principally by providing facilities for feed-back. Finally, such a sub-committee or authority would be responsible for maintaining a register of those specialists in oncology who had fulfilled the necessary requirements for CME.

In terms of a European model, it should be the aim of all national co-ordinating bodies to have as uniform a system as

possible compatible with different health services and different systems of postgraduate training. A European authority could have a major co-ordinating and facilitating role, although the strict concept of monitoring CME would have to be based at a national level.

FINANCING OF CME

The working group agreed that adequate funding was a mandatory prerequisite to instigate a fully operational CME programme. Such funding should complement existing financial budgeting but should not involve reduction in the service already provided. Although such funding would be costly, it is anticipated that the implementation of CME programmes in the long term would be cost-effective because of the beneficial effect on patient care. The natural corollary of this fact is that CME must constitute a natural and mandatory element in the general expenditure of health care.

Different sources of financing CME

There are a number of different sources available to finance CME and these are summarised in Table 2. The profession itself is one of the important sources of financing CME. As CME is now recognised as a professional obligation, it has therefore to be financed independently by the profession itself with payments by the patient either directly, or in the form of insurance contributions and taxes.

Another source within the profession itself are the scientific and professional societies such as ESTRO, ESMO, ESSO, EONS, etc. These societies have the resources to produce programmes, seminars, educational material and other such backbone CME activities. They provide important services and have the ability to play an important role in the provision of funding in specific areas such as the granting of Fellowships, amongst others.

As already stated, quality of patient care should be the natural consequence of effective CME programmes. Medical institutions such as hospitals should fund intramural programmes as well as provide support for extramural activities. The recognition of the link between continuing professional development and cost-effectiveness in patient care should be a strong argument that CME protagonists can bring to hospital administration to encourage such funding. Their accreditation is dependent on the quality of patient care, and they should invest in CME for their doctors and nurses.

In France, for example, 2.1% of the health budget is by law dedicated to continuing medical education and such a precedent should be encouraged. Doctors should not be financially penalised for CME activities—on the contrary, such activities should be financed in part at least by the host institution. Medical schools and universities are, by their very nature, professional CME bodies and interaction between them and practising doctors is of valuable benefit—such bodies can also act as external auditors of CME programmes.

Table 2. Sources of financing for CME in oncology

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- Members of the profession itself
 - Scientific and professional societies
 - Medical institutions such as hospitals, schools and universities
 - Governmental Ministries of Health
 - Insurance companies, pharmaceutical industry and businesses
 - European Commission
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The already mentioned relationship between CME and the delivery of a quality health care system needs to be addressed at government as well as at institutional level. Government has an obligation to contribute financially to CME by differing means such as an incentive income (Belgian model) and tax relief for CME expenses. In a similar manner, social security and insurance companies have an obligation in the field of quality of health care, and can benefit from CME by a reduction in costs, while their support for CME will not affect professional standards.

Other groups such as pharmaceutical companies and businesses should be included in the financing with appropriate safeguards to ensure that their interests do not conflict with the objectives of CME. Charities and grant-giving bodies have recently been initiated by the cancer leagues in Europe as possible supporters of CME. It is important to point out that contributions from outside the profession, whether from government, insurance companies, pharmaceutical firms, etc., must be channelled through independent professional bodies to maintain the objectives of CME. The sole aim must be that patients receive the best treatment for their condition and this can be achieved by improving the standards of medical care.

The working group had the conviction that the major providers of funding for CME should come from the profession itself at both national and European levels. The group felt that market forces (patients, insurance company) should be used to develop CME, but that this should in no way compromise the ethical aspects of patient care.

At a European level, specialist organisations and universities should create frameworks of requirements for CME qualifications and incentives for doctors to participate. DG V (Directorate General five of the European Commission) should finance the start of such a European policy.

QUALITY ASSURANCE AND EUROPEAN CO-ORDINATION

To assure the quality of continuing medical education, it is important to distinguish the different factors acting in this process. However, some of these factors can be grouped together in a simple input-transformation-output model extended with a feed-back loop. At the input site is the nurse, the doctor or the specialist with "insufficient" knowledge or skills. This is combined with an educational programme, with teachers and teaching methods and a certification or an accreditation system. After the transformation or learning process, CME will result in an individual with updated knowledge regarding prevention, diagnosis and treatment, improved or developed skills, and a changed attitude which, it is anticipated, will lead to an improvement in patient care. The degree of improvement has to be evaluated and registered and these results act as a feed-back system for the input variables of the model.

Of course, certain aspects of those participating in CME cannot be predicted before the start of the learning process, such as initial knowledge, skills and attitude. However, the commitment of the participants to CME can be promoted and stimulated by colleagues from the various national bodies. Because flexibility asks for different forms of CME, varying between an interactive dialogue and passive attendance at international meetings, quality assurance can be applied only to structured educational programmes. These programmes should cover preclinical and clinical aspects, as well as theoretical and practical considerations. The topics presented should suit the educational requests and requirements of

students, and some form of needs assessment should therefore be instituted. The goal of an educational programme should be clear to the participants, and sessions on "what is new" in research and clinical practice are advocated.

Teachers who are experts in their field should be taught how to teach and how to use new educational methods for active learning, interactive methods, computerised interactions and self-assessment methods. Quality assurance should also include the development of a register where a record is kept of personal and local activities such as self-learning, monitoring and peer-review as well as attendance at national or international conferences and other educational activities. The end result of such a system should be some form of accreditation where standardisation will allow the time devoted to CME activities to be measured and recorded.

Quality assurance of the learning process is difficult or nearly impossible, but the results of the learning process can be found in improvements in the standard of patient care. The evaluation of this improvement should be done by and within the profession in individual countries using methods such as peer-review, site-visits or audits. Quality assurance should be performed so that external authorities, including hospital management, the public and insurance companies can be comfortable and confident. Parameters of patient care should include the number of treated patients per doctor, results of treatment, the use of defined treatment protocols, joint patient management and self-monitoring of processes and outcomes.

The results of the evaluation of patient care should be used as a feed-back system which will influence the input characteristics of the model. As already stated, the co-ordination should be conducted by national professional bodies. They can promote and stimulate CME activities, and control the quality of CME programmes, teachers and teaching methods, leading to recognition of CME activities and determination of the number of credits. They should record and monitor CME activities of doctors, nurses or specialists, and probably also monitor the results of the evaluation of patient outcome.

International professional European bodies should act as consulting bodies and try to harmonise mutual recognition of CME activities as well as CME credits.

ONCOLOGY: THE NEED FOR AN INTERDISCIPLINARY CME

Major steps forward in the diagnosis and treatment of cancer have been taken through an interdisciplinary approach. Central to CME in oncology is the need for the specialist and others to learn about all valid available treatment options for patients. This implies learning about other specialist or sub-specialist approaches to clinical problem-solving. In the treatment of many types of tumour, the major goal must be to develop an interdisciplinary approach to problem-solving and decision-making. In this perspective, the teaching and training of such an approach to cancer treatment is important.

A first prerequisite for an effective team approach in cancer care is that hospital specialists adopt this interdisciplinary approach. It is, however, acknowledged that the joint planning and conduct of CME together with other health care providers is an important strategic goal. In the long term, it is also important that positive and constructive attitudes to an interdisciplinary approach is taught within the undergraduate curriculum. Within Europe, centres from different countries

could learn from each other, and different specialists in different countries could also exchange ideas and experiences.

There are several ways to promote an interdisciplinary approach in CME. A curriculum, for example, could state that a certain amount of CME should be devoted to this interdisciplinary approach. The different professional bodies should co-ordinate on national, regional and European levels taking the interdisciplinary perspective into consideration. A reciprocal arrangement could be instituted such that credit points obtained in one speciality can be transferred into another. Treatment protocols and state-of-the-art documents should point out, where appropriate, that interdisciplinary approaches are highly desirable. This would hopefully promote physicians to seek training in interdisciplinary approaches. It should be acknowledged that regular interdisciplinary treatment conferences or interdisciplinary reviews of cases are powerful CME tools. A flexible CME programme could also allow credit points for participating in planning, implementation and evaluation of multidisciplinary randomised clinical trials, as well as for taking active part in national, regional and European study groups.

Interdisciplinary courses in basic science skills could be considered. Basic science could be defined in the broadest sense as spanning from laboratory techniques and molecular biology to clinical epidemiology, biostatistics and communication skills. Research in the efficiency of teaching and implementation of the interdisciplinary approach should be considered.

CME AVAILABILITY, ASSESSMENT AND ACCREDITATION

CME in oncology is conceived and organised according to different patterns in European countries. Postgraduate education varies significantly within each European country, some of which deliver a specific title with a diploma to a doctor who has passed a written examination. Such wide discrepancies between European countries in postgraduate educational curricula imply that the establishment of common policies within a pan-European context is difficult.

Availability

As the main aim of CME is to guarantee medical practice of high quality, it should be offered to any doctor who wishes to ascertain or improve his/her knowledge and ability in oncology. Students should be familiarised with the CME tools during their graduate training and it should be included in all postgraduate programmes. Programmes designed exclusively for oncologists may be developed, but it is the duty of the medical community to offer sound oncological programmes accessible to any practitioner.

The means by which CME can be offered are wide-ranging and large international meetings should not be the only ones. CME programmes should be organised at a local level, keeping a close link with the professional practice. Being informed of the most recent trends from results, for example, of randomised trials is important, but the teaching efforts should also stress the actual implications of such research on patient management. CME must be tailored to the perceived needs of the practitioners whose advice has to be sought through questionnaires, evaluation forms, etc.

Assessment

Approximately three-quarters of today's CME cannot be submitted for evaluation as most of the classical tools for evaluation are not geared to the specific needs of CME. Formal examinations verify the theoretical knowledge of the

Table 3. Key aspects of CME in oncology

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- Its structure, function and implementation must be conducted within the medical profession itself
 - The need for an interdisciplinary approach is vital
 - Separate financial budgets for CME are essential
 - The goal should be to have a central European co-ordinating body
 - A common credit system with interspeciality recognition should be encouraged
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examinee, but not their skills and attitudes. Moreover, they by no means measure the effect of CME on clinical practice. Medical audit is bureaucratic and involves unaffordable costs.

The concept of self-evaluation and self-testing should be promoted, and a peer-review system should be set up to allow audit of CME activities. Organisations such as ESMO could act as an umbrella co-ordinating national CME bodies. The most fruitful CME is delivered in small groups where the practitioners actively participate, and such groups should be linked to the national body responsible for CME.

Accreditation

Participants state that CME as a whole has to be established by the profession and the scientific societies through a specific organ. It should be emphasised again that this should not be done by the state authority or its subsidiaries. CME should include appropriate means of incentives, providing the attendants with financial and professional benefits. The professional body responsible for CME should keep a record of the attendants, establish lists of CME's programmes and their respective value.

A system of "hours of credit" is the easiest way to organise CME. Credit is devoted to each approved CME activity, and the practitioner has to fulfil a requirement of a defined number of credits per year through a period of 3 to 5 years.

CONCLUSION (TABLE 3)

CME is a powerful tool to improve medical skills and knowledge. The programmes must comprehensively encompass the full scope of a speciality, and be readily accessible to any doctor. Peer-review and self-assessment are to be encouraged, and accreditation must be organised through an independent professional body.

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1. Charter in continuing medical education of medical specialists in the European Union. Union Européenne de Médecins Spécialistes 1994, D 9426 1315.

APPENDIX

Conference invited delegates: C. Zielinski, P. Aiginger (Austria); E. van der Scheuren, J. de Toeuf (Belgium); J. Overgaard, H. von der Maase (Denmark); H. Joensuu, P. Kellokumpu-Lehtinen (Finland); J.P. Armand, F. Larra (France); H.J. Meyer, K. Possinger (Germany); G. Delides, N.A. Pavlidis (Greece); J.P. Broe, M. Moriarty (Ireland); B. Andreoni, F. Cognetti (Italy); M. Dicato, P. Seck (Luxembourg); D.Th. Sleijfer, J.Th. Wagener (Netherlands); F. Calais da Silva, J. Soares (Portugal); E. Diaz Rubio, J. Estapé (Spain); L. Holmberg, U. Ringborg (Sweden); N.M. Bleehen, L. Harvey (U.K.).

Observers: P. Alberto (ESMO), H. Burns (EORTC CME Study Group), C. Dittich (EORTC CME Study Group), A. Eggermont (EORTC CME Study Group), A.J. Fairclough (EORTC), S. Blanco (EC, *Europe Against Cancer Programme*), P. Daly (Irish representative, Committee of Cancer Experts), J. Geraghty (EIO), R. Hudson (ECL), A.T. van Oosterom (FECS), K. Redmond (EONS), C. Sherman (AMA).