Medical education: From continuing medical education to continuing professional development

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Introduction

Medicine is constantly changing due to new information and technology. As medical practitioners we need to keep abreast with these changes in order to deliver the best possible management to our patients. Traditionally, this was by Continuing Medical Education (CME) in the form of formal lectures or seminars with time based credits points awarded. Such methods have been used for over 20 years.¹ Recently, there are demands both from within the profession and from the public to revamp our CME system.

Needs for CME revamp

From within the profession

Medicine is not only changing, it is expanding with the addition of new specialties and subspecialties every year. With the traditional CME, the nature and content of the educational activities are predetermined by the education providers and usually cover areas that are of common interest or of commercial value if they are sponsored by medical related companies. As different practitioners may have different interests and therefore different needs in updating their medical knowledge and skills, some of their needs can never be achieved by traditional CME.

With the introduction of Evidence Based Medicine (EBM) in 1992, some practitioners began to question the validity of traditional CME.² Studies have shown that CME/passive learning was good for assimilation of knowledge, but did not bring about improvement in patient care.^{3–5}

Technology has also affected the medical education

arena. The creation of the Internet in the last decade has meant more medical practitioners can access necessary medical information at home or in the office. This can cut down dramatically the time cost of being physically present at seminars or workshops and has gradually changed the learning behavior especially with the younger group of medical practitioners.

From the public

Expectations from patients have also increased. They expect more and better medical services and treatments. With the development of the Internet, patients can easily access medical information, be it correct or not. They are more likely to question the validity of medical treatments offered. Unfortunately, our newspapers tend to over emphasize adverse medical events. Medical practitioners have to revamp our armament to face such challenges and to match our education with quality otherwise we may lose the confidence of our patients.⁶

The ideal medical education program

The ideal medical education program should be linked with quality and must be built into the fabric of daily patient care and occur at the point of care.⁷ It should also be learner focused, addressing the needs of the practitioner. For the education program to be linked with quality, it should also be able to induce behavioral changes among practitioners. Clinically effective education programs identified from the published reports⁸ include those:

- where activities are specifically aimed at patient outcomes, change is usually demonstrated
- where activities are specifically aimed at practitioner outcomes, change is usually demonstrated
- activities that arise from personal incentives seem to have positive effects
- if the activity is reinforced, the results are better.

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A group of health professionals, educationalist and health service users were commissioned by the Chief Medical Officer in the UK in 1997 to review how general practice patient care might be better supported through better alignment of traditional CME, audit, research and application of clinically effective programs and this resulted in a new terminology: Continuing Professional Development (CPD) in 1998.⁷

CME versus CPD

The term CPD is defined as the process of lifelong uninterrupted learning and self-improvement for individuals and teams, which enable medical professionals to expand and fulfill their potential in maintaining a high medical standard and an ever improving quality of care that meets the need of patients.⁹

There is general agreement that CME refers to those ongoing educational activities after graduation that keep practitioners informed and up-to-date with medical knowledge.

During the past decade, CME expanded to include management skills, teaching skills, appraisal skills, communication skills, information management and topics that extended beyond the traditional medical subjects. If we only take CPD as the process that upgrades our medical, managerial, social and personal skills, then there will be no sharp distinction between CME and CPD.¹⁰ Then CPD is nothing more, but a new name for the old system and the whole discussion of this paper becomes meaningless.

Looking from another angle, with both CME and CPD involving upgrades on our medical, managerial, social and personal skills, the approach can be different. This can be done by an 'up-down' approach when the educational bodies provide all the lecture or workshop materials and allow learners to pick up the new skills during the course or this can be done by a 'bottom-up' improvement at the initiation of the learners who see the need for change. The former approach is used by traditional CME and the latter forms the basis of CPD.

Are all bottom-up improvements effective in improving patient care? In a recent critical review on the effect of different educational activities on patient care, Grol found six types of activities that are effective.¹¹ They are:

- interactive educational meetings
- educational outreach visits that tailored to individual needs and problems
- small group learning and peers reviews
- combined and multifaceted interventions
- use of computers and
- reminders

With the exception of reminders and use of computers, which involve prompting of the practitioners on their short-comings during patient management, the others involve a learner centred approach that addresses the learner's need with interactive educational development and review. This type of learning involves cycles of self reviewing of needs, planning, educational activities and assessing achievement forms the CPD cycle and has a closer link with quality of patient care.¹² Individual learning portfolios that were introduced recently to bridge the gap between learning and accountability is an example.¹³

Moving towards CPD

While it is easy to theorize CPD, its promotion among the profession is not an easy task.

First, CME has been widely accepted by the profession and has been in use for over 20 years. It works very well with a credit point system that is very familiar to every practitioner. More important still, this credit system has been used for quite a while by most Academic Colleges for accreditation. However, CPD is new to most of us, requiring a learning curve to get used to it.

Second, participants can easily estimate the number of credit points they get when selecting their CME activities. However, CPD involves cycles of review, planning, implementation and assessment. Each cycle may take months to complete and yet the outcome is not known until the cycle is completed. It creates uncertainty and anxiety among the participants.

Third, CPD needs much more work from the already over worked practitioner.

To organize a CPD activity is much more labor intensive than organizing a CME activity. It also costs much more for an education provider to provide a CPD activity as CME attracts sponsorship from pharmaceutical or health related companies more easily than CPD activities.

While there is evidence that CPD activities are more effective in linking with the quality of patient care, the evidence is not clear as to which activities are more appropriate for specific types of improvement and under which setting. More research is required to clarify the situation. If CPD activities are to be useful in the context of accreditation, the challenge that faces the Academic Colleges is to define a set of assessment citeria and standards that are measurable, objective, valid with reproducible outcome measures and yet simple enough for day to day running of the practice.

The challenge

Health of the community is the joint responsibility of all practitioners. If we want to move medical practi-

tioners to use more CPD as their educational activities, we need to change their education behavior, which in turn depends on their perception of:

- gains on doing CPD
- loss of not doing it
- capability of doing it
- marginal cost of doing it

To launch a successful CPD program, we need to publicize the concept and gains of doing CPD activities: its link with quality, gaining skills that meet the learner's needs yet at a pace determined by the learner, saving the time cost of being physically present at venues, earning CPD points without attending boring lectures, etc. The CPD activities with measurable outcomes, for example, computer recalls, clinical workshops can be used as positive examples. The CPD programs should be made simple to alleviate the threat to the participants. Pre-set templates or audit examples are used extensively to emphasize the easy nature of the exercise and that all medical practitioners are capable of doing them. Last but not least, for the CPD program to be well accepted by the profession, efforts must be made to minimize the time, effort and other marginal costs of the exercise. Computer generated audit reports are a definite possibility in the near future.

Conclusion

The medical profession is confronted with increasing demands to ensure and improve the care of their patients. While CPD is the accepted direction for practitioners, the speed for moving from traditional CME based program to a CPD based program should be gradual in order to be accepted by the profession. The traditional CME cannot be totally wiped out from the medical education arena as it is still the simplest educational activity and a lot of practitioners still rely on it for acquisition of new medical knowledge. Given the complexity of patient care, it is not realistic to expect changing from CME to CPD will solve the problem of health care delivery. It is most likely that both CME and CPD activities will coexist in the medical education arena for the near future.

References

- 1 Peptit DW. The physician recognition award. *JAMA* 1970; **213**: 1688–90.
- 2 Evidence-Based Medicine Working Group. Evidencebased medicine. A new approach to teaching the practice of medicine. *JAMA* 1992; **268**: 2420–5.
- 3 Armstrong D, Reyburn H, Jones RA. Study of general practitioners reasons for changing their prescribing behaviour. *BMJ* 1996; **312**: 949–52.
- 4 Davis D, Thomson MA, Oxman A, Haynes BR. Changing physician performance: A systematic review of the effect of continuing medical education strategies. *JAMA* 1995; **274**: 700–5.
- 5 Davis D, Thomson O'Brien MA, Freemantle N, Wolf FM, Mazmanian P, Taylor-Vaisey A. Impact of formal continuing medical education. *JAMA* 1999; 282: 867–74.
- 6 Blumenthal D. Quality of care: what is it? *N. Engl. J. Med.* 1996; **335**: 891–4.

- 7 Shaneyfelt TM. Editorial: Building bridges to quality. *JAMA* 2001; **286**: 2600–1.
- 8 Grant J. Review of the effective of CME. *Proceedings of a Conference on Continuing Medical Education;* 1998 March 25–26; London, UK. London: The Academy of Medical Royal Colleges; 1998.
- 9 Chief Medical Officer. *A Review of Continuing Professional Development in General Practice*. Wethery: Department of Health, 1998.
- 10 Peck C, McCall M, McLaren B, Rotem T. Continuing medical education and continuing professional development: international comparisons. *BMJ* 2000; **320**: 432–5.
- 11 Grol R. Improving the quality of medical care. *JAMA* 2001; **286**: 2578–85.
- 12 Chan KW. Continuous professional development: the link with quality. *HK Pract.* 2001; **23**: 298–300.
- 13 du Boulay C. From CME to CPD getting better at getting better? *BMJ* 2000; **320**: 393–4.