Do Conferences Contribute to Continuing Medical Education —Or is it Time for a Change in Approach?

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Two apparently conflicting pieces of evidence exist about physicians' Continuing Medical Education (CME). Physicians report spending, on average (and among other activities), many hours per year in CME activities, ostensibly geared toward improving their performance and/or optimizing the outcomes of their patients. In addition, producing and accrediting formal, planned CME events and activities are large enterprises intended to bring physicians up-todate with rapidly expanding medical information. Patterned after undergraduate medical education consisting of lectures, audio visual presentations, and printed materials, CME activities appear underpinned by a belief that gains in knowledge lead physicians to improve how they practice and thus improve patient outcomes. Despite this belief and the level of participation in and resources dedicated to CME, many studies have demonstrated a lack of effect on physicians' performance of current practice guidelines or sizable gaps between potential and real performance. In addition, a relatively weak effect of formal, planned CME on physician performance has been demonstrated in some studies.

Despite seemingly endless rounds of conferences, symposia, round-table discussions, and panel debates over the years, Continuing Medical Education now is not greatly different from what it was 40 years ago. There is simply a greater quantity of the same familiar things.

In light of the foregoing, one may be justified to ask: Why Continuing Medical Education? Three generalizations keep recurring in the literature. We say, first, that it is the personal responsibility of professionals to engage in never-ending refinement of their professional competence; second, that the body of biomedical knowledge is changing so rapidly that each of us must struggle constantly simply to keep up with an increasingly narrow field since it is hopeless to try to keep abreast of general medical knowledge; and third, that many deficiencies in health care not only exist but could be corrected by the appropriate continuing education of practitioners—particularly those practitioners who do not take part in regular programs of continuing education.

The diagnosis of deficiencies in the care of patients is surely an indispensable strategy, but far more difficult is the successful translation of even distasteful findings into sound educational practices that have some hope of alleviating the shortcomings which are identified. As professionals, we doctors seem more willing to consider or even to adopt new information or new technology than to change in any fundamental fashion the way we use it ourselves. We are convinced, or so the literature of Continuing Medical Education would make us seem, that it is our failure to apply new knowledge that represents the weakest link in the chain of assuring that the highest quality of medical care is delivered by the greatest number of physicians to the largest number of patients.

While this view may be correct, I am not familiar with any solid data to support it. In fact, the correction of the major health problems in Africa, as in other parts of the world, does not appear to require any substantial body of new knowledge. Rather, it requires that physicians use the knowledge they already have in a different way or more fully exhibit the professional attitudes that have characterized the physician's role as long as there have been physicians. As a more eloquent speaker recently put it, "If I were asked to compose an epitaph on medical profession throughout the 20th Century, it would read: 'Brilliant in its discoveries, superb in its technological breakthroughs, but woefully inept in its application to those most in need..."

Since I was a medical student 50 years ago, I have heard and I have read in medical literature covering a far longer period that physicians can be of the greatest service to society if they work at preventing disease rather than treating it. But which gets more academic attention and reward: the replacement of damaged arteries and heart valves or the prevention of smoking and obesity? We have been told again and again that most of those who consult us are the anxious well rather than the curable sick. But which gets more attention in our educational programs—the pharmacologic action of drugs and their side effects or the skill of listening and providing reassurance?

I am afraid that most of us have been seduced by the notion that we have a primary professional responsibility to keep abreast of current information—even if the information may have little use to many patients, and even if it means diverting attention from other elements of professional competence that may be of far greater importance to those we serve. Having been convinced that "Keeping up" is the goal, we are easily led to the conclusion that the need in Continuing Medical Education is for more instruction. Regrettably a recently completed survey by the World Health Organization on Continuing Medical Education in member nations has shown that the lecture is still the most widely used instructional method by a large margin.

If, indeed, change in behavior is the goal of continuing education, whether it is offered to practitioners or to medical educators, then perhaps most of what we now do must be dismissed in much the same way as Oliver Wendell Holmes, the autocrat of the breakfast table and one-time dean of the Harvard Medical School, once dismissed another component of medicine when he said: "I firmly believe that if the whole materia medica as now used could be sunk to the bottom of the sea, it would be all the better for mankind—and all the worse for the fishes."

It is time for change in our approach to Continuing Medical Education

The ultimate effect of formal CME interventions on the practice of physicians and the health of their patients as in the case of any intervention must be understood in the context of the methods by which the CME is delivered, including but not limited to the nature of the enabling resources available, the environment in which the translated competence is played out, and in the complex intrapersonal, interpersonal, and professional educational variables that affect the physician-learner's immediate goal of a CME activity. The exclusively didactic CME modality has little or no role to play. Knowledge is clearly necessary, but it is not in and of itself sufficient to bring about change in physician behavior and patient outcomes. Didactic interventions should receive less credit than do more effective methods or perhaps they should receive no credit at all. In contrast, variables over which the CME provider has control and appear to have a positive effect are the degree of active learning opportunities, learning delivered in a longitudinal or sequenced manner, and the provision of enabling methods to facilitate implementation in the practice setting.

While numerous questions remain regarding formal CME, including group size, the role of the learning and practice environment, the clinical dimensions of care, the assessment of learner needs, and barriers to change, one question still looms large: "In the face of longstanding knowledge about adult, self-directed learning and the general disinclination to believe that

didactic CME works—now coupled with findings that indicate it does not—why would the medical profession persist in delivering such a product and accrediting its consumption?" The reasons for the persistence of didactic CME include—but are definitely not limited to—the ease of designing and providing such activities, the substantial pharmaceutical sponsorship that promotes the transfer of information about new medications, and the dependence on traditional undergraduate models of education that are easy-to-mount and revenue generating.

Changing this delivery system carries serious implications for several groups of stakeholders that want to design and deliver effective CME. First, medical licensing boards and others with a genuine interest in assuring the public of physician competence must rethink the value of the CME credit system. Second, medical schools, specialty associations and societies, and other providers of CME must reconsider the value of the credit they provide, as well as the type and duration of learning activities they produce.

Further, organizations intending to ensure the quality of CME must evaluate the services that they provide to a large, complex, and expensive CME enterprise that values the production of single-session, teacher-centered activities over learner achievement. Finally, physicians must reflect on what they perceive as the CME experience itself and weigh the costs and lost learning opportunities of attendance at ineffective didactic sessions against participating in interactive, challenging, and sequenced activities that have enhanced potential for positively affecting their performance and the health of the patients they serve—the most important outcomes of all.

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