



## Commentaries

# Continuing Medical Education (CME): Goals and Objectives

**Many changes have occurred in the accreditation process for continuing medical education (CME) for doctors in the last 10 years, always under the guise of reform.**

For one thing, drug companies are not allowed to pay speakers or their expenses directly. This change occurred about 10 years ago. The money must be laundered through the hospital. I recently discussed this with a colleague within the academic administration, who took offense at my use of "laundered." "That term is used for drug money and other illegal uses. Laundered money is made to look like it comes from another source. It's a pejorative term." I agreed. I used it purposely as a pejorative term. Under current guidelines, drug companies continue to pay the speaker and the speaker's expenses but must give the money to the hospital to give to the speaker. The money is given as an "unrestricted educational grant," but this unrestricted grant requires an application to the company, naming the speaker and the objectives, so that if the speaker or the objectives are not in keeping with the marketing goals of the company, the speaker is not funded. Although there is an "absolute fire wall" between the marketing and educational divisions of each company, companies seem less inclined to fund speakers who are not enamored of their drugs. When companies have been asked to give truly unrestricted educational grants, say to donate money to a general pool, the answer has been 100% negative in my department, although not so in some others. So what we have is a "restricted" educational grant, given as "unrestricted," using laundered money, with which the CME agencies are entirely complicit.

This is not to say that all companies behave badly. Some companies do, in fact, separate the marketing and educational parts of their companies. In Neurology, we have two or three corporate-funded talks per year, in which the majority are theoretically chosen from anywhere and in fact are chosen

from lists approved by the corporation. The topics, however, are not, and the talks are not funded without review of the objectives.

The ACCME cannot guarantee quality. Its central mission is reducing bias. But it plays a role in quality assurance. One attempt to do this is by establishing standards for all talks. For example, all talks must list objectives before a talk is approved for CME credit. For my department this is an unnecessary requirement since all our speakers have been vetted in some way, either by virtue of their having academic appointments at well-known medical centers, because they are known in our community, or they have established reputations (especially for those sponsored by drug companies) and generally all three. They have been selected by the department.

I recently submitted a set of objectives for an unsponsored talk I was giving myself and was told that my objectives were not acceptable because I did not use language approved by the ACCME. I asked to review the documents that provided the language that was acceptable to the ACCME and was given the list of the acceptable descriptors. I was struck first by their length, a three-page document. I would have thought that two or three sentences would do. I was next struck by the apparently important distinction between "goals" and "objectives." Not having formal training in epistemology, I was unaware of the distinction. In case you aren't either, "Objectives should not be confused with goals, which are more general or global. Objectives are the action statements that operationalize a goal. For example, a goal for a CME activity may be "to help physicians provide the very best possible care to patients through improved communications." It turns out that objectives can only be met if they are introduced by particular verbs, 109 in number, for "communicating knowledge." There are 15 acceptable verbs for "imparting skills," four for "conveying attitudes," specifically excluding "ap-

preciate", "understand" and "learn." For arcane reasons, "acquire, consider, exemplify and realize" are more "measurable as the direct outcome of a CME activity" than "appreciate, understand and learn." Thus I can have the audience "realize" the differences between A and B but I cannot plan to have them "learn" what the differences are.

Since I have been giving CME talks for a few decades I felt transformed from the person who had been speaking in prose his whole life without knowing it to the person who discovered that he really was supposed to have been speaking in poetry. My objectives were rejected for using unacceptable verbs. I had thought my talk would allow the audience to "understand" the differences between two problems, when I should have been planning to lead them to "realize" the differences. Perhaps by realizing the differences they would be more likely to remember these differences, since realization carries the implication of self discovery, that is, my talk would lead the listener to come to certain deductions, achieving an epiphany that would seem to be his own, rather than mine, and therefore more likely to stick in his memory.

I am reminded of a teaching rounds when I was a third-year student in internal medicine. We had a guest attending, an older distinguished doctor, who listened to a student case presentation and then proceeded to question us and discuss the case. At the end he said that when he was a student one of his professors had taught him that he should always learn at least one thing from every teaching session. He turned to a student and asked, "Can you tell me one thing you learned today?" The student was caught unawares. The discussion had been about a blood dyscrasia, and somewhere during the meandering discussion, probably having to do with lymph node enlargement, the professor had mentioned that in most people one foot was larger than the other, hypothesized, he thought, to be due to a venous asymmetry. So the student said that he learned that most people had one foot larger than the other. After his 90-minute discussion of blood dyscrasias the professor was temporarily speechless, but pulled himself together and replied, "Well, I guess that is one thing."

My first objective when I give a talk is keeping the audience awake. I rate my lectures by the number of people who stay awake. There are points deducted for myo-

clonic jerks from nodding heads. Imparting knowledge is my second objective, which I hope parallels the lack of nodding heads. I am unsure if “imparting knowledge” is an acceptable objective.

– JOSEPH H. FRIEDMAN, MD

#### Disclosure of Financial Interests

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Sepracor, Glaxo Smith Kline, Neurogen, and EMD Serono.

Conflicts: In addition to the potential conflicts posed by my ties to industry that are listed, during the years 2001-2009 I was a paid consultant for: Eli Lilly, Bristol Myers Squibb, Janssen, Ovation, Pfizer, makers of each of the atypicals in use or being tested.

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## Superstition, Seizures and Science

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**When facing a terrible sickness, despairing therapies have** always been society's response to the plea, “Do something!” But if you don't know your destination, the likelihood of getting there becomes remote. Similarly, if the underlying mechanism of a disease such as epilepsy remains elusive, the chance of finding an effective therapy becomes equally remote.

The history of the search for a meaningful therapy for those burdened by repeated convulsions has been a painful voyage through strange territories, a tale of failed interventions, desperate treatments and irrational measures. Indeed, most of those treatments resembled more the art of the fugue than exercises in intelligent reasoning.

Despite the secular teachings of Hippocrates, the dominant thinking in the Classical Era had been that epilepsy resulted from supernatural, evil forces. Indeed, its very name, epilepsy, is a Greek word defining the condition of being seized, captured or overcome, with the implication that the grasping was undertaken by a nameless, outside entity.

Effective therapy could only be achieved, then, by resorting to interventions that could overcome those unworldly, shadowy forces, forces that inevitably must have been evil. Thus appeals were made to such personages as St. Ignatius, who had driven the devils from many epileptic victims, St. Valentine (whose priory in Alsace was the goal of many pilgrimages undertaken by victims of epilepsy) and, of course, St. Vitus, whose very name defined a class of abnormal movement disorders in helpless humans. In general, people believed that evil could be vanquished solely by spiritual rather than material talent; therefore therapy, rendered with contriteness and humility, must be confined to prayer, instruction and fasting.

Alternatively, there were those, particularly in primitive cultures, who believed that the roots of epilepsy lay in the victim's head rather than in his spirit. Some early treatments were directed therefore to the victim's head, through cauterization of the scalp and even by boring holes (trephining) in the living skull. Indeed, many a prehistoric skull shows evidence of trephination.

If, on the other hand, epilepsy was caused by some ill-defined poison, a toxin perhaps, then efforts would be directed toward a search for some counteractive chemical. During the Middle Ages - and beyond the customary measures employed for the care of epileptics such as blood-letting, purging and the use of emetic agents - four botanicals were routinely prescribed in the vain treatment for epilepsy: mistletoe, garlic, peony and elderberries. The Scottish anthropologist J. G. Frazer (1854 - 1941) stated that many healers affirmed the value of mistletoe because it clung so resolutely to the branches of sturdy oak trees, did not fall to the ground and hence should obviously be used in epilepsy, the falling sickness. (Medieval therapies were often identified by seeking analogies in nature.)

Other known substances to combat the unnamed toxins with the epileptic have included boar's gall, powdered human skull, dragon's blood and the intestinal stones of hawks.

And when all else failed, there was always fresh human blood as a treatment. The blood of slain gladiators in the Coliseum of ancient Rome was routinely fed to epileptic children. Hans Christian Anderson, in his memoirs, recalled witnessing state executions in Copenhagen with parents making their epileptic children drink the shed blood.

By 1850 epilepsy had been consigned to the category of those diseases which, in the words of one contemporary neurologist, were “cryptogenic, inscrutable, and alas, incurable.” In 1857, Dr. Charles Locock, obstetrician to Queen Victoria, published a brief commentary describing a trial with bromides that seemed to have suppressed the seizures in a group of young, epileptic women. And thus, gradually from an arena of vast ignorance, did earnest investigators gradually improvise effective, rational treatments for a disease previously thought to be incurable.

In 1920, the German scientist Hans Berger (1873 - 1941) devised the electroencephalograph (EEG), which detected brain waves emanating from the living brain. These electrical waves were captured by electrodes placed on the scalp, conveyed the intracranial impulses by wires to the instrument and expressed as oscillating waves on strips of moving paper. By inspecting these EEG-generated squiggles one can arrive at an objective diagnosis of epilepsy since, by the 20<sup>th</sup> Century, epilepsy was finally recognized as the systemic manifestations of abnormally discharging, anarchic, nerve cells. In the words of one neurologist, “What is greater magic than for the brain to write its own confession of wrongdoing on a sheet of moving paper?”

Most patients with epilepsy today have their convulsions safely controlled by medications and can lead normal, productive lives unencumbered by social isolation, superstition, ignorant bias, dangerous medicines or societal fear.

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Stanley M. Aronson, MD, and spouse/significant other have no financial interests to disclose.

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