

The 7 Habits of Highly Effective Psychopharmacologists, Part 3

Sharpen the Saw With Selective Choices of Continuing Medical Education Programs

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Issue: *Highly effective practitioners of psychopharmacology recognize that they must continually “sharpen their saw” as they cut through the diagnosing and prescribing decisions of daily practice. Choosing the right continuing medical education programs is critical to attaining balanced self-renewal in this era of rapidly expanding knowledge about neuroscience and new therapeutic options.*

This feature is the third in a series of articles^{1,2} showing how Steven Covey’s highly acclaimed principles³ can be applied to develop habits that make one a highly effective psychopharmacologist. Psychopharmacology is a rapidly expanding field, with an ever-increasing number of therapeutic options available for clinical practice.⁴

Sawing Through Bias

The information explosion in the neurosciences and psychiatry demands that modern practitioners continually cut through this flow of new information in order to update their diagnosing and prescribing skills. To do this, they must periodically

“sharpen their saw” by developing a strategy for mastering the use of new drugs in a setting where many of the educational opportunities are either biased or inefficient.

Continuing medical education (CME), a requirement for licensing of practitioners, has grown into a multibillion dollar industry funded largely by pharmaceutical companies and regulated by the U.S. Food and Drug Administration (FDA) and the Accreditation Council for Continuing Medical Education of the American Medical Association (ACCME).⁵

A great deal of debate has surrounded the potential commercial bias of some CME programs because industry-sponsored events, travel, samples, luncheons, and gifts do in fact result in the addition of new drugs to formularies and an increase in prescription rates of the sponsor’s drug.^{5,6} However, we can limit the potentially irrational prescribing by sharpening our minds through discriminatory thinking. The highly effective psychopharmacologist exploits the plethora of educational op-

portunities among sponsors by selecting unbiased programs or going back and forth between commercially sponsored programs. These strategies work to eliminate our confusion and help us cut through the programs being offered, like a file sharpening a dull saw, so that biased programs eventually cancel themselves out.

Sawing Through Educational Design

Much less attention has been paid to the relative ineffectiveness of the educational design of widely used CME delivery methods. This is particularly distressing because the extremely busy practitioners of today cannot make use of the efficient learning methods that exist in other fields of adult education when CME activities often do not incorporate them. For example, if the goal is to change physician’s diagnosing and prescribing practices, the most common CME delivery methods, such as conferences, will have little direct impact because physicians face a cord of new data equipped with a

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Take-Home Points

- ◆ Principles of adult education can be applied to continuing medical education (CME) to increase retention rates and facilitate adaptation of new knowledge into clinical practice as updated diagnosing and prescribing behavior.
- ◆ Reading and lectures are the least efficient yet most widely used delivery methods for continuing medical education.
- ◆ The most efficient CME programs incorporate features of modern educational design, emphasizing repetition via animations, evidence-based learning, and case-based learning as well as interaction utilizing multimedia and audience-response keypads.

dull saw.⁷ More effective methods do exist but are not widely used. These include systematic practice-based interventions, outreach visits, and a change in conferences to incorporate multimedia and advanced principles of adult education such as repetition and interaction.⁷

We busy practitioners cannot spend all of our time sharpening the saw, for we need to spend most of our time using the saw. Thus, highly effective psychopharmacologists select CME activities according to the teaching methods being offered as well as the information being presented.

Reading is of course necessary, but it is one of the least efficient methods of learning (10% retention of new information) compared with other learning methods.^{8,9} Retention rates must reach at least 70% to saw completely through new material and master it. The usual strategy for a practitioner to master new information is by repeated exposure until 70% retention is reached—by reading and then rereading, by attending lecture after lecture and conference after conference. However, by selecting educationally efficient as well as unbiased CME activities, one can sharpen the saw much more efficiently and quickly return to the work of cutting through clinical practice decisions.

Retention from lecture without audiovisuals is only 5%, the lowest rate. If a lecture is a traditional 59-minute, 59-slide “data dump” with good audiovisual support, there will be 20% retention, especially if the speaker realizes that only 7% of the message should be in words.¹⁰ Excellent speakers, in fact, recognize that 38%

of the message is in pace and inflection of delivery and 55% of the message in their body language. They exploit this fact to get the best retention rates, which are still very low for a traditional lecture format. Significantly more retention of new information occurs if it is delivered by demonstrations or discussion groups,^{8,9} but these are almost never employed at CME conferences.

The very highest retention rates occur with “practice by doing” (75%) and “immediate use of learning” (90%) methods. These are being incorporated into many adult education programs outside of medicine, especially with the use of multimedia technologies and interactive audience-response keypads. By presenting information to visual learners through multimedia animations, evidence-based learning can be greatly enhanced. Furthermore, we can practice by doing and have immediate use of learning if video vignettes are

used for case-based learning, enabling us to first make diagnosing or prescribing decisions during the CME course. This can be accomplished by executing prescribing decisions via keypads during the course and then applying this new knowledge soon after in our clinical practice.

Summary

The highly effective psychopharmacologist will develop the habit of “sharpening the saw” by clever selection of unbiased and efficient CME programs that incorporate the most thoughtful applications of the principles of adult education to enhance retention rates after a single exposure.

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