

FROM THE EDITOR

Special Issue: What Physicians Should Know About Biofeedback

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Biofeedback is an objective, computer-aided modality of investigation and treatment of a number of health-related conditions. The conditions comprise several pathologic conditions described in the International Classification of Diseases and Diagnostic and Statistical Manual of Mental Disorders systems.

Biofeedback offers an objective and measurable investigation of several components of the central nervous system, autonomic nervous system, and skeletal muscle. It also offers an objective and measurable means of rehabilitation or re-education for the treatment of a large number of conditions. With proper protocols, the treatments offer generally long-term results—either complete remission or major improvement of symptoms. It is noninvasive and nonharmful, closely corresponding to the Hippocratic dictum, “first, do no harm.” Unlike many medical modalities that address only diagnostic investigation or treatment, biofeedback encompasses both.

Biofeedback is a work in progress. It faces a fast process of evolution in its many aspects, being a function of comprehensive research and development of ever more advanced electronic equipment and computer memory, speed, and integration.

Physicians have generally been trained to follow the medical model. The model generally involves:

1. Presentation of symptoms by a patient,
2. Diagnostic process of investigation,
3. Reaching of diagnostic conclusions, and
4. Treatment of medical type, physical rehabilitation type, or surgical option.

The diagnostic process has two components: the physical examination and testing. In terms of the testing, the more measurable and objective the testing modality, the greater the help it can give to the physician in reaching the diagnosis, and to the patient in terms of understanding his or her condition and proceeding to treatment, such as consistently required by evidence-based medicine.

The medical model has many roots and many branches. In the Western medicine model, pharmaco-therapeutics have consistently held a preponderant role. Their relevance is not to be diminished. However, taking medicines, whether prescribed by a physician or over the counter, confers to the person a passive role. Human nature is more complex than that. Our brains and bodies seek autonomy and self-help to bring back health—that is, an active role. If offered a choice, many people would choose a treatment modality that does not include medications and submissiveness to a system

that fosters that. It behooves the wise physician to learn about such modalities and apply them where they can be most successful.

As an example, after all is said and done with examination and investigations for headaches, the patient may be given the choice to take the usual analgesics or to learn biofeedback to control the intensity and frequency of headaches. Many patients would prefer to choose an active modality of dealing with their symptoms. Whereas physicians know all too well about the extent that analgesics work for headaches and their side effects, much is to be learned by physicians about the effectiveness of neurofeedback or surface electromyography/biofeedback for tension headaches or neurovascular feedback for migraines.

Should physicians learn about biofeedback and become able to offer their patients an investigative and therapeutic choice? The answer should be an unequivocal YES.

This special issue aims only at an introduction of the topic to the enlightened physician, is limited to a number of salient topics, and does not purport to encompass every aspect of its involvement in the health field. A comprehensive description would be the subject of a very large textbook.

As stated above, the number of topics where biofeedback has a documented and proven value is large. A number of academicians and clinicians have contributed articles to this issue on their topics of current interest related to what physicians should know about biofeedback. Physicians are invited to respond to this issue with questions, queries, and requests on topics of interest.

Let's hope for the development in our century of a more comprehensive medical model that acknowledges a relevant role for the biofeedback modality.



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