Neurotherapies for diagnostics and treatment—such as electroencephalography (EEG) neurofeedback, single-photon emission computerized tomography (SPECT) imaging for neuropsychiatric clinics from which EEG neurofeedback often use anecdotes and testimonials to highlight the efficacy of the services offered,2,4 which may lead to misinterpretation and create an erroneous impression about the efficacy and evidence base of certain therapies.

The regulation of neurotherapy services for medical treatment largely falls to individual states, which define and limit who (i.e., individuals with which types of licensing) can offer medical services for which indications. “Scope-of-practice” regulations set out the services that are considered to be within the limits of one’s license. The main questions regarding licensing and scope-of-practice are threefold:

1. Does the provider hold a professional license?
2. Is the technique and indication treated by the provider considered to be within the scope-of-practice for that license?
3. If applicable, does the provider comply with the state’s legal requirements involving CAM and unconventional therapies?

Neurofeedback providers and some SPECT clinics increasingly are promoting to individuals who may be considered vulnerable, as they may be more prone than others to be exploited or to suffer psychological harm. Clinics offering such therapies may capitalize on their desperation by making unfounded claims about the efficacy of their services.

Neurofeedback or neuropliotherapy is one brain stimulation technique that is FDA-approved treatment for major depression, migraine headaches, and obsessive-compulsive disorder. In a preliminary scoping review, we found that over a hundred clinics promote the technique for off-label (i.e., unapproved) indications ranging from post-traumatic stress disorder (PTSD) to schizophrenia.

In the realm of neurofeedback, however, there appears to be far more variance in terms of licensing, with few MDs but many psychologists, mental health counselors and social workers. Neurofeedback does appear to be within the scope-of-practice for individuals holding these licenses in the three states (California, Texas, and Florida) whose regulations we examined.

Regarding the provision of CAM, many states have regulations specifying requirements for the provision of such treatments, such as mandating patient assessment and specific informational disclosures regarding the nature of the therapy.

We have outlined the unique characteristics of alternative neurotherapies and the distinct ethical and legal questions that arise from their provision. By drawing attention to alternative neurotherapy practices as a whole, we have attempted to recognize this larger social phenomenon that merits ethical scrutiny. Linking this phenomenon to CAM allows us to take advantage of a wide body of ethical and legal scholarship in this domain.

One potential explanation for the rise in alternative neurotherapies, particularly in recent decades, can be found by examining how regulation in the U.S. applies differentially to medical devices and pharmaceutical drugs. While the prescription of drugs is tightly regulated at the state level, there are no analogous restrictions surrounding the use of medical devices. This regulatory difference has likely contributed, at least in part, to the flourishing of alternative neurotherapies.

Future research in this domain should aim to better understand the salience of specific ethical concerns to inform policy recommendations that encourage the ethical provision of alternative neurotherapies.

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REFERENCES

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