

Integrative mental health strategies for kids

Expanding the clinical toolkit

By Timothy Culbert, MD, FAAP

“The child’s brain is the most complex ecosystem in the known universe and cannot be understood by reductionistic analysis. We must embrace the whole child as a dynamic and interactive reflection of his/her world.”

Scott Shannon, MD
Wholeness Center, Fort Collins, Colo.

Rates of neurodevelopmental/behavioral/emotional disorders in kids, including ADHD, autism spectrum disorders, anxiety, learning disorders, and depression, continue to rise in the United States. In fact, a 2014 study in Pediatrics that reviewed data from 2001 to 2011 concluded that childhood disability increased from 6.9 percent in 2001 to 7.9 percent in 2011. Childhood disability actually declined for those with physical disabilities, *but for children with neurodevelopmental or mental health disabilities it increased by 20.9 percent!* The reasons for this are complex and multifactorial, and likely include:

- Over-medicalizing common symptoms or misdiagnosis
- Changes in DSM diagnostic criteria
- Media exposure and parent education
- A poor fit for a given child’s behavioral/learning style with his or her educational environment
- A greater awareness of mental health disorders by health care clinicians in general, particularly primary care providers

In addition, the argument exists that children in the last two to three decades have experienced increased exposure to additive biological and psychosocial “toxic stresses” that allow for, or facilitate, the phenotypic expression of an individual’s genetic predisposition for one of these mental health conditions.

Many primary care doctors must see children with complex mental health challenges every day, but have less and less time to spend with them due to mounting pressures to be efficient and generate revenue. They may find it easier to prescribe a pill than take the time to counsel parents and patients on behavioral and other nonpharmacological options.

Conventional treatment

The two most commonly used conventional tools to address neurodevelopmental or mental health issues have been psychotherapy and treatment with psychoactive medications. Medicines can be very helpful but as Sidney Wolfe, MD, (director of Public Citizen’s Health Research Group) points out, doctors often are far more knowledgeable about the benefits of drugs than they are about the risks that commonly lead to “medical over-optimism” and overprescribing. The rates of prescribing medications for children has at least tripled in the past 15 years with prescriptions for stimulants, antidepressants, and antipsychotics, even for younger children, leading the way.

In my practice of developmental/behavioral pediatrics in the Twin Cities for over 25 years, I have found that parents clearly want more holistic treatment options for their children and routinely ask, “Is there anything we can do instead of just putting our child or teenager on more medications?” They have become well-educated health care consumers on behalf of their kids, using the Internet and other resources as

a way to better understand the risk-to-benefit balance of treatments.

Parents’ questions and concerns about conventional medical treatments led me to pursue training in a number of unconventional areas. I began by learning about various mind/body skills such as biofeedback and medical hypnosis in the 1980s. I learned more about alternative medicine approaches like yoga, massage, aromatherapy, and meditation in the 1990s. I completed a Bush Fellowship in this area in 1999/2000 and The Kaiser Institute Program For Integrative Medicine in 2001. Recently, I have been training in functional medicine and nutrition.

These experiences have led me to understand that there are a variety of safe, evidence-based, non-drug, holistic therapies that can treat children with a variety of behavioral/developmental disorders such as ADHD, autism, depression, and anxiety. This article will provide a brief introduction to some of these promising options.

Blended medicine: the best of both

The truth is that parents have been far ahead of pediatric health care providers in trying alternative treatment options for many years. I believe we are obligated to partner with families in making sensible choices that consider all available options, both conventional and so-called “complementary.” We also need to work with patients and families in evaluating the balance of safety, efficacy, and cost for a given treatment option.

All the usual tools of Western, allopathic mental health care such as psychotherapy, psychotropic medications, specialized school programs, and rehabilitative therapies such as occupational and speech/language therapy *are still necessary and valuable for many children.* However, holistic approaches such as diet/nutritional changes, supplements, meditation, yoga, biofeedback, expressive arts therapies, biomechanical approaches (such as massage), acupuncture, exercise, and even new electronic healing technologies and mobile apps can all be helpful.

An approach that combines the best of safe, evidence-based therapies from all traditions and that always considers the patient as a whole person, including their mind, body, and spirit is called *integrative* or *holistic*.

Formal training in integrative medicine now is available in many medical schools, nursing

schools, medical residencies, and fellowships. The Twin Cities is a hotbed of activity in integrative medicine training, practice, and research. Work is being done at the Minnesota Holistic Medical Association, The Penny George Institute for Health and Healing, and the Center for Spirituality and Healing at the University of Minnesota.

The largest pediatric mental health provider in the region, PrairieCare, is launching a system-wide project to offer integrative options to all of its patients beginning in 2015.

Integrative approaches to mental health

“Healing refers to the physical, mental and spiritual processes of recovery, repair and reintegration that increase order, coherence and holism in the individual, group and environment. Healing is not the same as curing.”

University of Arizona Integrative Medicine Program, 1996

So what are some of these promising integrative approaches that offer nonpharmacologic benefits? Although the integrative approaches discussed in this article do have research backing them, they don't yet have dozens of gold-standard studies behind them. The approaches are all very safe and reasonable as treatment alternatives or adjuncts. In addition, we should remember that the research studies on the risks/benefits of psychiatric medications used in childhood are not perfect either. In fact, studies have called into question the efficacy of antidepressants as compared to placebo treatments, and recent studies also suggest that long-term stimulant use in ADHD may not be consistently beneficial. There also are concerns about the harmful effects that may develop in children's developing central nervous systems from long-term use of psychoactive medications. Research bias in published psychiatric studies sponsored by pharmaceutical companies also has been a concern.

Nutrition. Many parents ask about the effects of poor nutrition and behavior and wonder if their child eats too much junk food, particularly carbohydrates and refined sugars. New evidence does suggest that this can negatively affect attention and mood. A plethora of recent studies on the “second brain” located in the GI system suggests GI health and the microbiome (helpful bacteria) have important impacts on emotions and behavior. Key nutritional deficiencies may compromise the brain's ability to make appropriate levels of neurotransmitters and perform other key neurological functions. Supplementation with therapeutic doses of key vitamins, minerals, and herbals sometimes can offer effective and better-tolerated alternatives to prescription medications (see the sidebar on this page). Diet changes (gluten-free, chemical-free, low-carbohydrate/low-sugar are some examples) and an approach that involves healing the gastrointestinal tract (including probiotics) also can be very helpful for many kids with mental health challenges. Neurologist David Perlmutter, MD's best-selling book “Grain Brain,” details some of the key interactions between the GI tract and the central nervous system.

Mindfulness meditation. Studies indicate that mindfulness meditation (also called mindfulness-based stress reduction or MBSR), along with other mind/body techniques such as yoga and biofeedback, can improve symptoms of depression, anxiety, and ADHD. This method does require regular daily practice for several weeks to achieve benefits. It's important that these techniques be presented to kids in ways that are developmentally appropriate and engaging. A new group therapy approach for teens with anxiety and depression that includes mindfulness practices, nutritional education, and yoga has been developed in the Twin Cities by Henry Emmons, MD, a pioneering holistic psychiatrist based on his successful adult model called “Resilience Training—Pathways to Joy” (see www.partnersinresilience.com).

Lifestyle activities. Basic lifestyle activities such as time spent in nature, exposure to sunlight, regular vigorous exercise, and certain animal assisted therapies such as hippotherapy (therapeutic horseback riding) can help kids with depression, autism spectrum disorders, and ADHD.

Other integrative techniques.

Techniques such as massage, acupuncture, and aromatherapy have less research to date for treatment of mental health disorders in children. However, promising adult research studies and expanding clinical experience with hundreds of children over the last several years suggests they can be helpful as well. The respected journal *Pediatrics in Review* (published by the American Academy of Pediatrics) has been running an ongoing series of articles on evidence-based use of complementary medicine for several years. Oxford University Press also has an entire series on integrative medicine, including volumes on integrative pediatrics and integrative psychiatry.

Healing technologies

Kids love technology and although it is true that the American Academy of Pediatrics warns against the dangers of kids spending too much time using technology, it can be a tool for healing behavioral problems when utilized carefully.

There are some new healing technologies that help kids understand mind/body connections more directly and make the therapy process more playful and engaging.

Biofeedback apps. Biofeedback involves visual or auditory information about a physical process such as muscle tension or breathing rate that kids can learn to control. Heart rate variability biofeedback involves using a small sensor (ear clip or finger pad) to measure the pattern of the heartbeat. Individuals can learn techniques combining paced breathing with positive mental imagery as a way to cultivate an optimal state of heart rate patterning, which has been called “resonant frequency” by some and “psychophysiological coherence” by others. In this state, individuals typically feel calm, happy, and attentive. Several different devices on the market make heart rate variability feedback fun, easy, portable, and cost-effective. The *emWave Pro* for computers (Mac or PC), and its sister product for the iPad/iPhone, *Inner Balance*, make it

easy to take the device with you. Also, *GPS for the Soul* is a free download that uses your cell phone's camera as a sensor.

Me Moves app. Many adults and kids find that traditional seated forms of mind/body skills training such as meditation, mental imagery, and breathing practice are boring and that to quiet their mind and body they prefer movement. Me Moves was developed by a mom to help calm her autistic child. It is based on research ideas that support the use of rhythmic visual patterns, music, and movement in engaging “whole brain” activities. With this app, the child moves his or her arms and hands in sync with geometric shapes, combined with music and visuals. Many teachers and special educators have seen improvements in anxiety and attention issues by utilizing this program.

The Adventures of Super Stretch. Another fun, movement-based app was developed by a Twin Cities yoga teacher, Jessica Rosenberg. Children watch an animated hero called “Super Stretch,” who teaches them basic yoga poses onscreen in developmentally appropriate language while they watch real kids demonstrate the poses.

Healing Buddies Comfort Kit. Children's Hospitals and Clinics of Minnesota and Ridgeview Medical Center teamed up with local nonprofit DesignWise and created a mobile app that teaches kids of all ages self-regulation (mind/body) skills to manage pain, anxiety, insomnia, and nausea using a variety of scripted relaxation techniques as well as learning about acupuncture and aromatherapy.

Conclusion

Children, teenagers, and their families have been seeking out and experimenting with holistic therapies for many years, often out of frustration when conventional mental health treatments including rounds of psychiatric medications and/or “talk” therapies haven't helped. It is incumbent on all pediatric health care providers to develop some foundational knowledge with regard to integrative approaches for kids with ADHD, ASD, depression, and anxiety. Research supports that many of these approaches are safe and effective for certain patients. This will enable providers to partner with kids and their families to choose, prioritize, sequence, and make referrals for safe and effective therapies. Families should be given the chance to ask questions and be treated nonjudgmentally. We must learn to be careful, open-minded listeners and be honest about what we know and don't know as we guide and treat our patients and their families. An integrative approach to mental health care can open new doors to healing for many of our patients and allow us to expand the mental health toolkit for children and adolescents. ❏

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