## **Mixing Medicine**

## A new school of "integrative" health-care providers sets out to wed alternative treatments to mainstream medical practice.

## by Deborah Rudacille

Since childhood, Wendy Lafferman, 27, has suffered from headaches. Diagnosed with migraines in high school, she has seen numerous doctors and swallowed a mountain of pills to combat pain so severe that "sometimes I'm literally digging my head into a pillow," she says.

So when a friend of her mother raved about a neurologist in Pikesville who had assembled an unconventional team of practitioners—including a hypnotherapist, an acupuncturist, and a naturopath—to treat headache, Lafferman was not impressed. "I've been seeing doctors for fifteen years," she told her mom. "Nothing is going to help."

But at the Mid-Atlantic Headache Institute (MAHI), she found a neurologist, Marcia Ribeiro, who supported her use of alternative healing practices like acupuncture and cranio-facial massage while fine-tuning a pharmaceutical regimen aimed at reducing the frequency and severity of her headaches. "Dr. Ribeiro is willing to walk that path with me," Lafferman says. A few months after starting treatment at MAHI (and switching to a nutritionist-recommended diet free of gluten and sugar), she says she is doing much better. "This is the first time I've made it completely through a full week of work in months."

Lafferman's embrace of "integrative medicine," which links a range of alternative healing practices with traditional Western medicine, is shared by a steadily growing number of Americans. Approximately 38 percent of people over the age of 18 (and 12 percent of children) use some form of alternative or "complementary" medicine, according to a 2007 survey carried out by the National Center for Health Statistics. Use of non-vitamin, non-mineral natural products such as fish oil, flaxseed, and echinacea top the list; other therapies include deep breathing, meditation, and massage. From acupuncture to herbal supplements to yoga, alternative healing—typically dispensed out of people's homes, small offices, and clinics—is booming.

But most American physicians are considerably less enthusiastic about these treatments than their patients. A kind of "don't ask, don't tell" policy rules—many doctors don't ask and patients don't tell them about their use of alternative healing methods not legitimized by science.

"[Doctors] are not familiar with this, and yet nearly 50 percent of their patients are using alternative or complementary medicine," says Brian Berman, director of the Center for Integrative Medicine at the University of Maryland School of Medicine. "We need to make sure they know about them so they can refer appropriately. Whether or not they use the therapies themselves, they need to be able to work together in a larger team."

When Berman founded CIM—the first such center in an academic medical institution in the country—eighteen years ago, he and other proponents of integrating alternative therapies with Western medicine were on the far fringes of medical practice. Today, forty-five universities around the country have some kind of program in

integrative medicine, combining research, teaching, and clinical practice in varying proportions. But the approach has been slower to penetrate the ranks of practitioners. "I would like to see it more widely adopted so that it's part and parcel of standard care," Berman says. "But there are still quite a few skeptics."

MAHI provides a glimpse of the kind of integrative medicine practice that Berman and other alt-med pioneers have long envisioned. The institute looks like a typical doctor's office, with a suite of examining rooms and offices. There are no trickling fountains or Chinese ideograms on the walls in the waiting room—just copies of *WebMD* and patient information brochures, industrial carpeting, and a receptionist's counter with glass windows and stacks of insurance forms.

But some of the activities carried out here are revolutionary in such a setting. In one room, physical therapist Rupal Davé massages a patient's head, neck, and shoulders, easing the tension that can lead to headaches. Licensed clinical social worker Dale Liebman conducts hypnotherapy, helping patients manage stress via visualization. Cognitive psychologist H. Richard Waranch uses biofeedback and behavioral counseling. Acupuncturist and naturopathic physician Stacey Kargman checks for food allergies and recommends herbal supplements.

"Other practices are largely driven by pharmacy," Liebman points out. "We take a more holistic approach."

MAHI was founded by Ribeiro and nurse practitioner Maureen Ann Moriarty in 2004. Both had worked in conventional medical practices for many years. But they wanted to do something different. Their experience at MAHI has shown that headache patients—"people sick of being sick"—were also looking for a different approach. Patients meet first with Ribeiro, and then she and Moriarty craft an individualized treatment plan for each patient that combines pharmacy with one or more of the other services provided at the clinic. "Sometimes it's a little bit of everything," Ribeiro says. The team treats not just the pain of the headache, but also the factors behind the pain—diet, stress, personal habits, and lifestyle.

It's precisely that attention to the whole person that is touted by proponents of integrative medicine as an improvement on the traditional treat-the-symptom model, particularly when it comes to chronic pain. Berman says that when he founded CIM at the University of Maryland in 1991, "we started based on pain and pain management because that's one of the areas that we don't have all the answers for in conventional medicine."

Housed partly in an old mansion on the grounds of Kernan Hospital, a short drive from the Social Security Administration in Woodlawn, CIM has grown far beyond its modest roots. The center has received more than \$30 million in research funding from the National Institutes of Health Center for Complementary and Alternative Medicine since its founding and has been an NIH Center of Excellence since 1995. Integrative medicine is now part of the medical school curriculum at Maryland, and Berman's center has worked collaboratively with the Greenbaum Cancer Center, R. Adams Cowley Shock-Trauma Center, and other medical and surgical departments. Soon, it will be conducting research with the Institute for Genome Sciences. "I would never have expected that back in '91," Berman admits.

Across town at the Johns Hopkins School of Medicine, the integrative approach hasn't yet penetrated the curriculum or garnered as much institutional support. But even at that bastion of empiricism, some clinicians are exploring the use of complementary modalities and have formed a loose support network. Anastasia Rowland-Seymour, a Hopkins internist, was introduced to folk healing methods while a resident at Columbia University Medical Center in New York City, where she also attended medical school. "My patients were largely Dominican," she says, "and there was a lot of use of teas and tinctures and other ways of healing that seemed to have some

effect. I felt that in order to provide quality care, I should know a little about what people were using and whether it was safe to take with their other meds."

After completing her residency and working for a year and a half at Harlem Hospital, she did an integrative medicine fellowship with Dr. Andrew Weil, the godfather of the discipline. "I thought I was going to learn about nutrition and supplements, which I did," she says. "But I also got exposed to other types of healing that I hadn't known much about, like acupuncture and mind-body practices, and more esoteric things like energy healing and homeopathy."

Rowland-Seymour doesn't use all of those methods in her own practice. Some patients come to her specifically because she has been recommended as someone who uses an integrative approach, but about half "don't have a clue that I'm interested in integrative medicine," she says. "For all they know, I'm just a general internist."

Patients often hesitate to volunteer information about whether they are using alternative practices or supplements because they are apprehensive about the reactions of medical doctors—with good reason. Doctors rely on data, not anecdote, when treating patients. And it's precisely the lack of good data establishing the efficacy of alternative and complementary therapies that impedes their acceptance, critics say.

Steven L. Salzberg, director of the University of Maryland's Center for Bioinformatics and Computational Biology, maintains that there is no evidence to support the claims made by proponents of acupuncture, homeopathy, and other types of alternative healing. "It's pseudoscience and quackery," he says.

Salzberg, a biostatistician who is a vocal advocate for open access to research data, has helped sequence the genes of hundreds of organisms, including human and avian influenza viruses and anthrax. For scientists like him, medicine is and ought to be based in rigorous science, with data that can be quantified and results that can be validated. Alternative and complementary treatments are conspicuously lacking in these essentials, he says—and the number of people who actually use them is far lower than proponents claim, because everything from drinking herbal tea to practicing yoga is included in surveys. "They include all kinds of common practices that people don't use instead of medicine. I have herbal tea in my kitchen," he says. But that doesn't make him a supporter of what he terms "non-medical, non-scientific" approaches to treating disease.

Salzberg doesn't object to the wellness aspects of integrative medicine—controlling diet, exercising, and managing stress. He says doctors should and do regularly speak with patients about such preventive practices, which are "all good things with plenty of evidence to support them." But he has strong words for medical schools that have begun offering fellowships in integrative medicine that include such practices as Reiki (a spiritual healing technique from Japan) and traditional Chinese medicine. "They are training reputable doctors in what is nothing more than voodoo," he says.

Much of the improvement experienced by people who use such alternative therapies can be explained by the placebo effect, he adds. "If they are being treated for mild pain, which comes and goes, and they are seeing a therapist, they'll give them the credit. The only harm is to their wallet."

He is much harder on acupuncture, which is probably the most accepted alternative therapy but whose effectiveness is unsupported by data, he says. "Acupuncture, ayurveda, homeopathy—all of these things were made up in the premedical era, and people still cling to them despite the fact that whenever controlled studies are done, there is no evidence that they work at all."

And that has real-world consequences, he says. He points to a British study that revealed alternative practitioners recommending homeopathy as a substitute for vaccination for people preparing to travel in Africa. "Most of the stuff is harmless. Where it becomes harmful is when people who have real diseases use it as a substitute for medicine."

Rowland-Seymour, Ribeiro, and Berman all point out that herbs, yoga, and massage are not a replacement for medical treatment. "I don't want to give people the impression that just because they walk into my office and I know something about supplements that may be useful that I am going to tell them to use that instead of conventional remedies," says Rowland-Seymour. "That would be irresponsible."

Rowland-Seymour understands the skepticism from other physicians. Integrative medicine "is not well-accepted by many of my colleagues in part because there are concerns about what might be suggested to patients and what patients are doing already that physicians don't know about," she says. "Also, there are studies that are perfect in terms of methodology and there are studies that are very much less than perfect. That makes it very difficult to determine whether something has efficacy, whether it's really safe. So I completely understand the reticence."

But she and others like her are more willing than the average physician—and certainly more willing than scientists like Salzberg—to believe that practitioners other than medical doctors have a role to play in health care. Ribeiro, for example, works closely with naturopathic physician Stacey Kargman, who has a busy practice of her own, the Maryland Natural Health Center, a few miles from MAHI. Naturopaths promote the innate healing ability of the human body and rely on diet, exercise, lifestyle changes, and herbal supplements to combat disease and maintain health.

In working with headache patients, Kargman examines their lifestyle and diet and does allergy testing for corn, wheat, and dairy. "If I find something, we'll do a trial for six to eight weeks, maybe stop eating wheat, for example," she says. "Often that does the trick. Just by eliminating or cutting down something in the diet you can eliminate or at least reduce the frequency of headache." When she sees people with serious illnesses, however, she refers them to specialists. "I will send people to a cardiologist or neurologist if I think they need a more specific diagnosis or treatment," she says.

The reason the collaboration with Ribeiro works, Kargman says, "is that we both support what the other is doing. We use the best of both worlds."

That, notes Berman, is the very definition of integrative medicine. "There's a lot of good in conventional medicine, and we don't want to throw the baby out with the bathwater," he says. "But we need other members of the team, like the acupuncturist, nutritionist, and maybe the yoga teacher. We shift the focus so that [health care] is not just about disease management but health and wellbeing across the life span."

The approach is especially effective in treating chronic disease, he and other practitioners point out. Unlike infectious disease, chronic disease is often created and exacerbated by diet and lifestyle—and that's particularly true of chronic pain. "Pain comes from a lot of different levels: emotional, mental, physical, and maybe even spiritual," Berman points out. "A lot of people are saying that we need a more multi-disciplinary approach to deal effectively with that."

The anecdotal evidence, at least, bears this out. Both Lafferman and Sharon Chafee, a patient of Kargman's who

adopted a diet to treat her fibromyalgia (chronic muscle pain and fatigue), experienced significant improvement. Chaffee also dropped 30 pounds. "I'm 53 years old, and I've never felt this good," she says. Both women also say that when they slip up and eat a forbidden food, their symptoms return. "I did it for about a month and felt good, but then ate two chocolate cookies and I got so sick," Lafferman says. She was convinced her to stick to the diet.

Weight loss can be quantified, but pain is subjective and difficult to measure. When improvement can be quantified and validated in a controlled study, skeptics may relinquish their doubts. "A good scientist wants to know the truth," Salzberg says. "If a treatment works and can be shown to work by scientifically valid studies, we call it medicine."

However, the history of medicine shows that radically new approaches often need time to be accepted, even when empirical evidence supports their efficacy. In 1847, when Dr. Ignaz Semmelweis ordered obstetricians at his Viennese clinic to wash their hands in chlorinated lime solution before attending women in labor, he was ridiculed. Even after the mortality rate from "childbed fever" fell from 18 percent to 4 percent at the clinic— and to nearly zero when instruments too were treated with the solution—his observational data were dismissed because he could not offer a scientific explanation for his findings.

He was vindicated, of course, when germ theory was developed—about thirty years later.

—Deborah Rudacille writes frequently about health and science.

## **Buyer Beware**

Just because something is natural doesn't mean it's harmless. Herbal supplements and vitamins are not tested for potency, safety, or efficacy by the Food and Drug Administration—and many are little more than filler. "People bring in stuff they've bought cheaply," says naturopathic physician Stacey Kargman of the Maryland Natural Health Center, "and when you look at the ingredient label, it's mostly colors and dyes."

Some herbal preparations and vitamins can react with drugs. Johns Hopkins internist Anastasia Rowland-Seymour recommends developing a good relationship with a pharmacist if you plan on self-medicating with herbal remedies. "Pharmacists have access to great databases and can check if there are known interactions," she says.

If you want to do research on your own, check out the data reviews in the Cochrane Collaboration (www.cochrane.org), an international clearinghouse for information on evidence-based medicine. In 2007, the National Institutes of Health granted a five-year, \$2.1 million research grant to the Cochrane's complementary and alternative medicine arm, based at the University of Maryland's Center for Integrative Medicine. Center director Brian Berman says the funding has helped gather and publish clinical trials of alternative therapies and conduct research to improve the methodology of literature reviews. "We've been working with people all over the world," he says.

It's also important to check the credentials of alt-medicine providers. "Ask about licensing and whether or not they went to an accredited naturopathic program," Kargman says. She attended a naturopathic medicine program in Arizona, one of only four in the country, and is currently licensed by the state of Vermont. (Maryland does not

license naturopathic physicians, though the state does license acupuncturists.) To find a licensed practicioner, go to www.naturopathic.org, the website of the American Association of Naturopathic Physicians.

No matter which alternative practices you are using, your primary care doctor should know about it, says Rowland-Seymour. "Even if your physician doesn't have a huge knowledge base about integrative medicine, they need to know what you are doing."

-D.R.