

Conversation with William Shaw, PhD—Integrative Medicine for Mental Health Conference

Interview by Dick Benson

William Shaw, PhD, is board certified in the fields of clinical chemistry and toxicology by the American Board of Clinical Chemistry. Before he founded The Great Plains Laboratory, Inc., Dr. Shaw worked for the Centers for Disease Control and Prevention (CDC), Children's Mercy Hospital, University of Missouri at Kansas City School of Medicine, and Smith Kline Laboratories. He is the author of *Biological Treatments for Autism and PDD*, originally published in 1998 and *Autism: Beyond the Basics*, published in 2009. He is also a frequent speaker at conferences worldwide. Dr. Shaw is the stepfather of a child with autism and has helped thousands of patients and medical practitioners to successfully improve the lives of people with autism, AD(H)D, Alzheimer's disease, arthritis, bipolar disorder, chronic fatigue, depression, fibromyalgia, immune deficiencies, multiple sclerosis, OCD, Parkinson's disease, seizure disorders, tic disorders, Tourette syndrome, and other serious conditions.

Integrative Medicine: A Clinician's Journal (IMCJ): Thank you for taking time to talk to me about the IMMH conference coming up. You are presenting on three topics at the event, can you provide an overview of your focus?

Dr. Shaw: It has been a very exciting venue to present at since we have a lot of the customers Great Plains Laboratory as attendees who are interested in the topic of mental health. And of course, we have a lot of psychiatrists, but also general practitioners, naturopaths and so forth who are interested in mental health, and some of the integrative approaches to treating mental health.

Psychiatrists are probably the biggest single group. Then of course there is a big variety and there are some psychologists, but I would say the psychiatrist are the largest segment in attendance. And these attendees are very interested in the integrative approach to healthcare.

IMCJ: When people think of integrative medicine, they don't necessarily think of psychiatry as a method, but there's so many cases of issues like homelessness which have a mental health basis.

Dr. Shaw: That's right. That's the most common cause of homelessness, untreated psychiatric issues. Daniel Amen

who presents on PBS, he always talks about that almost every other organ in the body, they do tests, but nobody thinks of, for mental health doing a check of the brain. And so, he's one of the few people that does that routinely. He's doing spec scans to look at indicators of inadequate blood flow, to different areas of the brain.

IMCJ: One of the topics that you're focusing on is Omega-3s, most of the discussion on Omega-3 seems to be on cardiovascular health, yet your presentation relates it to mental health.

Dr. Shaw: That's right. As a matter of fact, Omega-3's are influenced on almost any health issue you can think of. For example, just probably a couple of hours ago, I came across an article on the Omega-3 as a cancer treatment, that is showing that DHA is taken up by cancer cells, which then destroy the cancer cells. It's actually a potential cancer treatment. Omega-3s are very, very important in health overall, but you do have to have balance. I'm a big Omega-3 fan myself, but you have to make sure that you take balanced amounts of Omega-6, like the evening primrose oil.

I found that I was having an itching episode and it was from excessive amounts of Omega-3, and just by taking the evening primrose oil, it completely stopped that symptom. The balance is very important, but I would say that most people who are not big seafood fans and especially here in the Midwest, seafood is not as available as on the coast, that there's a lot of people with Omega-3 deficiency.

IMCJ: At Great Plains, do you have Omega-3 tests that you run?

Dr. Shaw: We do. We offer the gamut of tests. And it's a very reasonable price and we give the ratios of what's very important, the Omega-3 to Omega-6 ratio, which most people say is around one. Our ancestors who didn't have to deal with grain fed beef and processed foods had a ratio very close to one, but now in places that have unhealthy ratios, it might be a 40 to 50 times more Omega-6 to Omega-3. These people are very susceptible to many of the inflammatory based diseases. A lot of mental illnesses are due to excessive inflammation in the brain. Omega-3

fatty acids are an excellent treatment for almost every mental illness that I've reviewed.

Conditions like autism, ADHD, depression, bipolar depression, have a very high portion of psychiatric illness that is associated with a deficiency of Omega-3. One of the studies that I present is the fact that if you look at psychiatric hospital admissions versus the person's Omega-3 concentration, people with high Omega-3 basically do not end up in a psychiatric institution. People with very low Omega-3 and proportionally high Omega-6 are much more likely to end up with a psychiatric admission. It's one of the major factors in prevention of a psychiatric disease. And matter of fact I would recommend that every psychiatrist or psychologist would do that, the first thing is recommend a supplementation with Omega-3 fatty acids.

IMCJ: Would a condition like depression be related to Omega-3 deficiency?

Dr. Shaw: Absolutely. A deficiency of Omega-3 is very common in depression. Omega-3 supplementation should be one of the first things looked at in the case of depression. It's very similar with cholesterol. Low amounts of cholesterol are associated with depression and/or they're associated with drug addiction and suicide. People have to be very careful. One of the most important things is not to overdo statins. Statins are being used for control of cardiovascular disease, but you have to be very careful.

A study of the World Health Organization indicates that cholesterol around 225 is optimum for health. And a lot of people are being treated who have lower values than that and to me, that's not healthy. To me you should not be administering statin drugs to people who have values of less than 225. That is if the value is less than that are associated with increased infectious disease, increased depression, increased psychiatric disorders, increased drug addiction, increased suicide. So 225 is the optimum value for long life.

IMCJ: How is this related to our food supply, is it able to provide these nutrients?

Dr. Shaw: The difficulty with our food supply is the overuse of chemicals. Large portions of our chemicals are contaminated with weed killers, with organophosphate pesticides and with other kinds of chemicals as well. And of course, many of our meats now are grain fed animals, which then have excessive amounts of Omega-6 fatty acids, which are inclined to cause inflammation. Whereas the animals in the wild and even some of our grass fed beef is much more healthy, but of course is not nearly as available or may be much more expensive because it's not the standard way of fattening up our meat animals.

In the field of psychiatry many practitioners do not have enough understanding about the need for good nutrition, and the fact that many of our foods are contaminated or may be lacking in essential nutrients like Omega-3 fatty acids. Much can be done to reduce mental illness and improve mental health by addressing the issues of contaminated food or foods that are lacking in adequate supplements like the Omega-3 fatty acids.

IMCJ: Can a regimen of nutritional supplements reverse mental health issues such as depression?

Dr. Shaw: Definitely. There have been numerous studies done in which the patients were administered certain regimens of essential fatty acids, particularly the Omega-3 fatty acids and had significant benefits. Another big factor today is the water situation. Because water is contaminated, many people switched to drinking purified water. The difficulty is the purified water is frequently inadequate in the amount of lithium, an essential element needed for mental health. And because of the use of purified water, many, many people have inadequate amounts of lithium and so have a greater susceptibility to psychiatric disorders.

There have been a few researchers who have spent virtually their entire scientific career looking at the factors of lithium deficiency in mental health. There was a very famous study in Texas, where they looked at different counties, some of which had very high amounts of lithium in the water and some which had very low amounts of



lithium in the water. The counties with low amounts of lithium in the water were associated with increased rates of mental health hospitalization, increased crime, increased murder, increased rape, increased drug abuse, and then of course, just the reverse counties that had very high amounts of lithium in the water had excellent, favorable mental health issues.

Lithium is one of the most important elements that's not given enough attention. I'm of the view that lithium should probably be added to the water, and probably instead of fluoride, fluoride has a number of negative things. It is good for reducing cavities, but it has a few negatives, and it would be much better to add lithium to the water. You could probably reduce the amount of money spent on psychiatric care by 50%, just by supplementing lithium into the municipal water supplies.

IMCJ: What about the kids issues with conditions like ADHD and ASD, what can be done from a nutritional standpoint for those children?

Dr. Shaw: A lot of the same things. Studies have shown that lithium is commonly deficient in the mothers of children with autism, as well as the children with autism themselves, and that low cholesterol is a very common factor in autism. We have had a lot of great experiences with children with autism who had extremely abnormal behavior, extremely aggressive, either attacking other children or in some cases causing violence to themselves, by banging their heads into the wall. And with a cholesterol supplementation, there would be a rapid decline in such a negative behavior. We have lots of anecdotes, and unfortunately the only formal study of the cholesterol treatment in autism, the funding ran out, so they were not able to complete the study.

But the data up until it was discontinued was that it was very favorable, that the kids with autism had multiple improvements in their behavior with cholesterol supplementation, and the same thing with Omega-3 fatty acids supplementation. The bad behavior and autism was associated with low Omega-3, and Omega-3 supplementation was very helpful in improving behavior. The same goes with ADHD. And the problem is there are so many parents that just want an immediate change in their children because they're sometimes not getting help until they're completely fed up. So the nutritional approach is a lot of times, a little more complicated than the single pill.

There was a very nice study that showed that children who were kicked out of school, grammar school for bad behavior, a very high percentage of which had a very low cholesterol values, like 130 or lower for the total cholesterol. You think of cholesterol as being something bad, but it's actually an essential food item just like other vitamins and minerals. And unfortunately, the companies making the statin drugs want to promote that cholesterol is almost like a toxic chemical. There have been cases where they're going to doctor's offices and telling physicians that they should

increase the statins, even on people whose total cholesterol has dropped to a hundred. They're trying to convince them they should get more statins to get to a cholesterol value of zero, in which case they wouldn't have to worry about the patient because most of the patients will be dead at that point.

IMCJ: A little bit about COVID, with the long-haulers syndrome, is there a relationship between that and nutritional issues?

Dr. Shaw: I think there has been a lot of information about vitamin D and I think it still remains somewhat of a controversy, but I know I've seen some reports of a much lower incidence of COVID infection and lessened symptoms with vitamin D, there's also a connection, a biochemical connection with age. The mortality is much lesser in children, and that is associated with a lack of a key enzyme. Children have very low amounts of a protein called Phospholipases A2 in the lungs, whereas the amount of that increases as you get older. A number of people have used a Phospholipases inhibitor, CDP-choline, that's a very potent inhibitor of Phospholipases A2. And that's what I've commonly recommended that people try it out.

We haven't done, and there hasn't been a formal study because doing a formal study would be extremely expensive, probably millions or even a billion dollars, if you did the same kind of study as required for a pharmaceutical. But a lot of people have tried it out because it is a Phospholipases A2 inhibitor and the high Phospholipases A2 is correlates with age. The older people are the higher their Phospholipases A2, and they've even done studies in animals that showed that the animals, that the young animals on the site when they were infected with Coronavirus had very low mortality. But if they inhibited Phospholipases A2 even the older animals had a much higher survival rates. So they've got animal studies but so far, no formal human studies.

I've had a number of physicians who have done that on their own patients and say, they've had very good successes with very few severe symptoms or deaths on people taking the CDP-choline, the inhibitor of Phospholipases A2.

IMCJ: For the attendees coming to this year's event, what are you hoping their main takeaways are going to be?

Dr. Shaw: Well, that there are lots of easy things you can do for mental health, especially if these nutritional supplements have been extremely well documented. It was a gigantic number of studies showing positive effects of Omega-3 fatty acids on mental health. I mean, it was maybe in the tens of thousands, the number of articles. So those are things that virtually anyone can put together in their practice. Just the week after they go to the conference, they should be able to use a lot of these nutritional interventions very effectively.