

Conversation with Joseph Pizzorno, ND

Interview by Sheldon Baker

Dr. Joseph Pizzorno, ND is a transformational leader in medicine. He has helped establish and advance the academic, scientific, and clinical standards for natural, functional, integrative, and environmental medicine through half a century of work. As founding president of Bastyr University in 1978, he coined the term “science-based natural medicine” and led Bastyr to become the first-ever accredited institution in the field. He has set worldwide standards by authoring or co-authoring 6 textbooks for doctors, including the Textbook of Natural Medicine (which has sold over 100 000 copies in 4 languages across 5 editions) and Clinical Environmental Medicine (the most widely used textbook in its field). He is Editor-in-Chief of PubMed-indexed IMCJ—the most field’s widely read, peer-reviewed journal (25 000 copies each issue). He is a founding member of the Board of Directors of the Institute for Functional Medicine where he recently finished serving his third term as Chair of the Board. He has been extensively involved in public affairs as a founding board member of American Herbal Pharmacopeia and as a member of the science boards of the Gateway for Cancer Research, the Hecht Foundation, and Bioclinic Naturals. Presidents Clinton and Bush appointed him to two prestigious government commissions to advise Congress on how to integrate natural medicine into healthcare. A licensed naturopathic physician, educator, researcher, and expert spokesman, he is also the author and co-author of 8 consumer books (most recently, Healthy Bones, Healthy You! with his wife Lara). His newest book, The Case for Dietary Supplements, will be released in 2024. To help make this extensive body of knowledge more accessible to clinicians and consumers, he has developed artificial intelligence tools that unravel the complex needs of each unique individual. Recently he began advancing the concept of Health Medicine to encompass the promotion of health and resilience as a critical balance to the limited practice of only treating disease. He has received prestigious lifetime achievement awards for his work from leading organizations, such as the Institute for Functional Medicine (IFM), the Academy for Integrative and Health Medicine (AIHM), the Integrative Health Symposium (IHS), the American College of Nutrition (ACN), the Natural Products Association (NPA) and the American Association of Naturopathic Physicians (AANP).

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created numerous brand marketing communications and public relations campaigns for health and wellness organizations. Contact him at Sheldon@NutraInk.com.

Integrative Medicine: A Clinician’s Journal (IMCJ): You’ve had quite a distinguished career. Through half a century. You’ve been a transformational leader in medicine and helped establish and advance academic, scientific and clinical standards for natural, functional, integrative, and environmental medicine, virtually all aspects of alternative health matters care to comment.

Dr. Joseph Pizzorno, ND: Yes, it’s interesting. Looking back what started as simply wanting to keep the message alive ended up being a crystallization point for the whole revolution in medicine.

It’s difficult to speak about this and modestly I don’t tend to do that. One key reason I’ve been successful is because I really work to give many others as much credit as possible. Having said that, if you look at Andrew Weil, Jeff Bland, and myself, we’ve probably changed medicine more than anybody has in our in our generation. It’s been a remarkable journey.

IMCJ: You’ve created the term science based natural medicine did that didn’t just pop into your head one day.

Dr. Pizzorno: That’s a good question. When I started people asked me, “What are you doing?” I said my belief is that natural medicine has tremendous benefits, but until it comes up to modern standards of education, research, textbooks and things like that, it would never to be taken seriously by the healthcare community. So, my career has been creating and documenting the scientific basis for this medicine.

While I was doing this, and as I was seeing research supporting our vision, I coined the term science based natural medicine to give people an understanding of what I was trying to create. Interestingly enough, I met with a lot of resistance in the naturopathic medicine community because science with a capital S was a bludgeon used by the AMA to destroy non-drug medicine. I told people I wanted to be more scientific. They said, “You can’t do that.” I said wait a minute science is a tool that is used by everybody. It’s used to advance a body of knowledge. We don’t do science to convince people we’re right. We do science to get better.

How do you know if what you're doing is helping patients? If you're a good doctor, regardless what you do, if you have a good relationship with your patient, you're able to stimulate within them their belief and ability to get healthy. Your patients will in general get healthier.

You did your intervention and then we'll see patients got healthier. Therefore, we believe our interventions are effective. However, maybe they got better just because you're so good at interacting with people. But your therapy could either be improving them or have no efficacy or could be making them worse. How do you know which one it is unless you do science?

So that's the story I told people. When I start positioning it that way of how we get better, not how we prove ourselves to the MDs, people became much more accepting of this approach. I think it's because of that scientific approach that I was able to lead Bastyr to become the first institution of its nature anywhere in the world to get accredited.

IMCJ: You founded Bastyr in 1978. Did it take a while for accreditation to take place?

Dr. Pizzorno: Yes. When I started the school, I wrote a letter to what at that time was called the Northwest Association of Schools and Colleges that accredited all the colleges and universities in the Northwest. I think there were about a hundred colleges being accredited at that point and they sent back a letter saying, "We're sorry we don't accredit institutions like yours."

So, I did one thing that was really important, but then something happened that was accidentally important as well. I helped create the American Association of Naturopathic Physicians. That's the national association of the profession. I took on the role of creating an accrediting agency for natural medicine colleges that would be approved by the U.S. Department of Education. That turned out to be a challenge, but we eventually succeeded. Interestingly, another school that started in Oregon, called the American College of Naturopathic Medicine, did not accept the assertion of ineligibility asserted by the Northwest Associates schools and colleges like I did. They hired an attorney and sued them. They sent a letter asserting their bylaws say you have to accredit colleges like ours. Unfortunately, while the college was then accepted into the accreditation process, they did not achieve the approval and would eventually close. When I found out that they had done that I realized that since we had, in my opinion, much higher quality education we would be more likely to succeed. I had recruited PhDs to teach the basic sciences and MDs to teach diagnosis. I hired naturopathic doctors to teach treatment. This allowed us to create a very credible science-based educational program. So, when we applied again for accreditation, and we got it.

Dr. Pizzorno: That was simple to say, but hard to do. The accreditation is a two-step process. They were very clear to

say you cannot call yourself pre-accredited. All you're doing is starting the accreditation process. Once they accepted us for the accreditation process, they immediately appointed a committee to reconsider their eligibility standards and just so happened as the chair of the committee was a retired Dean of the University of Washington School of Medicine. They came back with standards that said, "we can't credit institutions like yours." So even though they had awarded us Candidate for Accreditation status based on the quality of our educational program and faculty, they pulled our status because we were now "ineligible." That began a political process.

IMCJ: You're quite a prolific writer. You've authored or co-authored six textbooks for doctors. One sold over a 100 000 plus it was translated into four different languages across several countries

Dr. Pizzorno: Michael Murray and my *Textbook of Natural Medicine* was first published in 1985 in a loose-leaf format that we updated quarterly for many years until adopted by a medical publisher, now Elsevier. It was translated into four languages and is now in its fifth edition.

IMCJ: Your *Clinical Environmental Medicine* is the most widely used textbook in its field.

Dr. Pizzorno: Yes.

IMCJ: Do you still do much writing?

Dr. Pizzorno: Yes, I still write a lot. I'm the editor-in-chief of *Integrative Medicine: A Clinician's Journal* which has now been published for over 20 years. I provide an editorial view every two months. Typically, around 3000 words and since *IMCJ* is now PubMed-indexed I've over 50 editorials in the medical literature. I'm continuously updating many of my books, as well as writing new books.

IMCJ: You've got a new book coming out soon that makes the case for dietary supplements.

Dr. Pizzorno: One of the most common things I hear from people is they don't need vitamins. They say they just eat healthily. But in today's world just eating healthy is not enough.

There are many reasons why people need supplements such as foods being depleted in nutrients because of agriculture with chemicals. Healthy foods contain other important molecules as well like carotenoids and flavonoids and other classes which have a huge impact on health. People are primarily eating chemically grown foods. Then add to this the fact that we live in a polluted world, and that a polluted world requires additional nutrients to protect us.

And then how about optimization? If you're an athlete you want to build muscle as fast as possible or run as long as possible. You start adding all these things together and you see supplements are crucial for health.

IMCJ: You've also written a number of consumer health books. I think one in conjunction with your wife.

Dr. Pizzorno: Yes. My wife, Laura, and I just wrote a book called *Healthy Bones, Healthy You*. I say co-authored it, but she wrote over 90% of it. I added some information around environmental toxins and bone health. But the vast majority of it is her creation. It's based on her experience for over a decade now of helping hundreds of women regain their healthy bones.

IMCJ: You were founding member of the board directors for the Institute for Functional Medicine (IFM). Are you still on the board?

Dr. Pizzorno: I am still on the Board and recently retired from my third term as Chair.

IMCJ: You've also been extensively involved in public affairs and are a founding board member of American Herbal Pharmacopoeia and a member of the science boards of the Gateway for Cancer Research, the Hecht Foundation and Bioclinic Naturals. When do you find time to sleep?

Dr. Pizzorno: As age has caught up with me, I'm trying to decrease the number of projects I'm engaged with. I can't keep up with it as I once did. I have been fortunate to have abundant energy, intelligence, and a strong commitment to improving health. But I don't have those extra levels of drive that I used to have so I am prioritizing more now.

IMCJ: You were appointed by Presidents Clinton and Bush to prestigious government commissions to advise Congress how to integrate natural medicine into healthcare. How did that come about?

Dr. Pizzorno: There is a period of my life for 10 years where I was in Washington, DC about every six weeks. I was working on trying to change the federal environment to facilitate more opportunities for natural medicine. Things like getting scholarships for our students to go to school and funding for natural medicine research. Another area was changing reimbursement systems to better cover natural medicine, because right now most of our health approaches are not covered by private or governmental insurance. Some progress has been made. For example, we're now eligible for Medicaid in a number of states but haven't been included in Medicare yet.

IMCJ: You approached Congress to act?

Dr. Pizzorno: Our goal was to work with Congress or one of our champions like Senator Tom Harkin to change the federal laws and regulations to be more supportive of natural/integrative/functional/environmental medicine. After making several recommendations to Senator Harkin, he suggested we stop trying to do this piecemeal. "Let's create something special." So, he did two things. First, he created the White House Commission on Complementary and Alternative Medicine. He invited more than a dozen people, including myself, who had a high level of interest in our cause, plus a few public members to look at how you incorporate natural medicine into our healthcare system. We then created a comprehensive report for the President and for Congress. The other thing we worked with this group on was the National Center for Complementary and Alternative Medicine policy. The idea was to specifically develop within the NIH a division to advance natural medicine. We garnered over \$200 million in financing from the government to fund research in this direction. It was looking really exciting as many members of Congress were excited by our work.

IMCJ: Does the Commission still exist today?

Dr. Pizzorno: No. Our report was completed and unfortunately came out a month after 9/11. That was unfortunate because we had two Presidents who had a great interest in our recommendations. President Bush was particularly interested in corporate wellness programs which I felt was quite encouraging. We had the report ready to go, and then 9/11 happened and everything shut down and was redirected. Nonetheless, the report was used in Congress and had unexpected benefits such as being used in a presentation to the government of Australia and helped advance the status of natural medicine there.

IMCJ: You've also had your hand in artificial intelligence. What is your feeling about that and how it will enter into the nutraceutical industry and integrate our healthcare system.

Dr. Pizzorno: For decades now, I have been promoting the idea of personalized health. That's easy to say and difficult to actually accomplish. Health improvement turns out to be way more complex than people realize.

How can we improve people's health and lives? You have to exercise, eat healthfully, not smoke, and avoid environmental toxins. Things like that make sense. So, we started looking at how you get people highly personalized guidance on what's most important to improve their health. Our bodies are enzyme machines. Everything in our body is based on enzymes. Enzymes are made up of a protein base which we call a proenzyme. However, to become active, most enzymes require a co-factor which is typically a vitamin or mineral. This is why they are required for life. You've got to look at how well the protein

backbone is made, the availability of the required cofactors and the presence of environmental toxins that poison the enzyme.

What are called single nucleotide polymorphisms or SNPs determine how well those enzyme cores are made, which has a huge impact on how effective it's going to be. Then you add to it about 250 minerals and molecules in food that are known to be necessary for human physiology, not just the vitamins and the minerals but also the carotenoids and the flavonoids, as well as other factors. Then there are now about a hundred metals and chemicals in the environment that are toxic to human physiology. While there's thousands in the environment, they're at least a hundred at high enough levels that are measurably affecting human physiology right now. So, you got three million single nicotine polymorphisms, 250 nutritional elements necessary for health, and 100s of toxins. Then there is the constantly evolving research literature. For example, there's over 100 articles every month just on vitamin D. So, how can a clinician possibly understand all that huge complex physiology and keep track of the avalanche of new research? You put that all together, no matter what condition or how smart they are, and you can't keep track of all this. I'm a smart guy and can't. That's why I believe artificial intelligence is a great tool to be able to put all this information together about a particular person to deeply understand what's going on with their physiology. In other words, determine where things are not working properly and what is the optimal way to establish optimal physiology. I've been working on that for a long time, and we've had some good successes. Nevertheless, I've struggled to make it work yet commercially.

IMCJ: But it's something you hope you'll be able to do.

Dr. Pizzorno: You're absolutely right. I was just working on some development work for that.

IMCJ: You've been honored by numerous prestigious organizations and the list is long. You've listed several in your in your bio and the honors and the accolades keep on coming. How do you feel about that?

Dr. Pizzorno: It's nice to be recognized for my work, and I don't do it for the recognition. I've always had this strong passion to promote the health of people. When I learned about natural medicine many decades ago, it just struck a deep chord within me. I appreciate accolades, but it's not why I do it.

IMCJ: Would you like to add anything about your background and achievements?

Dr. Pizzorno: It's an interesting question. Actually, I've lately been thinking about this. For some reason I've

always had an ability to articulate a vision of something that could be better and attracting other people to walk that pathway with me to make that vision happen. I've been doing so since I was a kid. Amongst my friends, I was the youngest and smallest, but I was always the leader. Not because I was a bully, but because I was able to articulate something we would want to do, and we just did it. And it's been that way my entire life. Kind of weird?

IMCJ: There are so many organizations that have honored you. Those are organizations and individuals who admire you as a person, and the work that you've done. How about going the other way? Is there one or a few people that you really admire in terms of the work that they do?

Dr. Pizzorno: Oh sure, that that's very clear. There are three that hugely impacted me. Of course there's many others as well. One is Jeff Bland. I regularly credit Jeff with helping me figure out how to put science into natural medicine. Jeff has always been an incredible visionary leader who I've been delighted to follow and help with my work. Conversely, I've helped him with a lot of his work as well. You look at the people he hired while creating IFM. Many were my graduates. We have a lot of cross fertilization.

Another who helped a lot in developing my understanding of nutritional medicine was Dr. Jonathan Wright, and his colleague Dr. Alan Gaby. For years we would meet monthly and discuss cases they cured with nutrition.

Finally, of course is Dr. John Bastyr. He was such an inspirational healing physician. I use him as an example for my students. Every class I teach I always tell them about Dr. Bastyr, and I make sure they know two things he said that hugely impacted me. Number one is, always get better. Before going to bed at night learn a new herbal medicine, homeopathic medicine or diagnostic tests. Always study and get better.

Second, he said "always touch your patients." Always let them know you care. This is important to activate the inherent belief in healing. He was a remarkable clinician, and I was quite fortunate to be able to study with and know.

When spending time with him in his clinic, we'd see failure after failure with conventional medicine. Go to this guy (Dr. Bastyr) and he gets you better. It was really remarkable.